

# Maintenance Dredging 35-Foot Main Channel and Turning Basin and Maneuvering Area

Weymouth, Quincy and Hull Massachusetts

Construction Solicitation And Specifications

October 2005

# MAINTENANCE DREDGING OF WEYMOUTH FORE RIVER, WEYMOUTH, MA

# **DESIGN AUTHENTICATION**

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This project was designed for/by the New England District of the U.S. Army Corps of Engineers. The initials or signatures and registration designations of individuals appear on these project documents within the scope of their employment as required by ER1110-1-8152.

SOLICITATION, OFF	FER, 1.	SOLICITATION NO.	2. TYP	PE OF SOLICITATION	3. DATE ISSUED	PAGE OF PAGES
AND AWARD	١٨	/912WJ-06-B-0001	X s	EALED BID (IFB)	19-Oct-2005	1.05.07
(Construction, Alteration, o	r Repair)   '`	VO 12 VVO -00-D-000 I	□ \	IEGOTIATED (RFP)		1 OF 27
IMPORTANT - The "offer" s	section on t	he reverse must be fully cor	npleted	by offeror.		•
4. CONTRACT NO.		5. REQUISITION/PURCHA	SE REC	QUEST NO.	6. PROJECT NO.	
		W913G86-5264-1991				
7. ISSUED BY	COL	DE W912WJ		8. ADDRESS OFFER TO	(If Other Than Item 7)	CODE
U S ARMY ENGR DISTRICT, NEW 696 VIRGINIA RD CONCORD MA 01742-2751	/ ENGLAND			See Item 7		
TEL:	FA	X: 978-318-8207		TEL:	FAX:	
9. FOR INFORMATION	A. NAME			B. TELEPHONE I	NO. (Include area code)	(NO COLLECT CALLS)
CALL:	RACHAEL	RAPOSA		978-318-8249		
	<u> </u>	S	OLICIT	ATION	· //·	<del></del>
NOTE: In sealed bid solid	citations "d	offer" and "offeror" mean	"bid" a	nd "bidder".	<del></del>	
		RFORMANCE OF THE WOR			JMENTS/Title, identifying	no date):
DRAWINGS as listed in SEC SECTION 00700, CONTRAC THIS SOLICITATION IS UN NOTE TO BIDDERS: Pleas 2005). All bidders must cor Application (ORCA) website database prior to completing	SPECIFICATIONS titled, 'MAINTENANCE DREDGING WEYMOUTH FORE RIVER, MA" dated OCTOBER 2005  DRAWINGS as listed in SECTION 00800, paragraph titled, "CONTRACT DRAWINGS AND SPECIFICATIONS"  SECTION 00700, CONTRACT CLAUSES, and SECTION 00800, SPECIAL CONTRACT REQUIREMENTS  THIS SOLICITATION IS UNRESTRICTED PURSUANCE TO PUBLIC LAW 100-656, SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROCESSION OF TO BIDDERS: Please pay special attention to Section 00600, Contract Clause 52.204-8, Annual Representations and Certifications (Jan 2005). All bidders must complete the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at http://orca.bpn.gov. Please ensure your firm is registered in the Contractor Central Registration (CCR) database prior to completing the ORCA requirements.					ertifications (Jan
The applicable NAICS Code	and Size St	andard for this procurement a	re as tol	lows:		
NAICS Code: 237990 Size Standard: \$17,020,000.00						
11. The Contractor shall begin	n performand	ce within15calendar da	ys and c	omplete it within	calendar days after re	celving
award, X notice to pro-	ceed. This p	erformance period is X man	datory,	negotiable. (See	Par 1.1, 00800	.)
		SH ANY REQUIRED PERFOR		E AND PAYMENT BOND	DS? 12B. CALENDA	R DAYS
	many calend	dar days after award in Item 1.	2B.)		10	
X YES NO				·		
A. Sealed offers in original and 2 copies to perform the work required are due at the place specified in Item 8 by 02:00 PM (hour) local time 18 Nov 2005 (date). If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.  3. An offer guarantee X is, is not required.  3. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.						
. Offers providing less than60 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.						

				•	SOLICITAT	TION, OFFER		-	tinued)			
·		<u> </u>	<del></del>					Alteration, or Repair)				
14. NAME AN	ND AD	DRESS OF	OFFEROR	2 /1	nclude 7IP C		·	Must be fully completed by offeror)				
	10 / 10	D11.200 01	OI I EIROI	. (,,	101440 211 0	ouc,	IJ. IELEF	15. TELEPHONE NO. (Include area code)				
							16. REMIT	ANCE ADDR	RESS (Includ	e only if differe	nt than Iten	1 14)
							See Item	See Item 14				
CODE			FACILITY C	OC	ÞΕ							
17. The offerd	or agre	es to perfo	rm the work	rec	uired at the	prices specified	below in str	ct accordance	e with the terr	ns of this solid	itation, if thi	s offer is
						alendar days a				any number eq		ater than
tne minimum	require 	ements sta	tea in item 1	13D	. Failure to i	insert any numb	er means th	offeror acce	pts the minim	num in Item 13	D.)	
AMOUNTS	- e	ECHED	ULE OF PR	ICE								
AMOUNTS	ا ا	E SCHED	OLE OF PR	ICE	:5							
18. The offerd	or agre	es to furnis	sh any requi	red	performance	and payment l	oonds.		· · · · · · · · · · · · · · · · · · ·			
					19. /	ACKNOWLEDG	MENT OF A	MENDMENT	 S	***************************************	<del></del>	
			(The offe	eror	acknowledges r	receipt of amendme	ents to the solici	ation give num	ber and date of	each)		
AMENDMENT	ΓNO.											
DATE												
DATE						<u></u>					<del></del>	
20A. NAME A OFFER (Typ			ERSON AUT	ГНС	RIZED TO S	SIGN	20B. SIGNATURE 20C. OFFER DATE					
					AWA	RD (To be co	npleted by	overnment)		L		<del></del>
21. ITEMS AC	CEPT	ED:						<del></del>		<del>. ·</del>		
22. AMOUNT	2. AMOUNT 23. ACCOUNTING AND APPROPRIATION DATA											
24. SUBMIT I	NVOIC	ES TO AL	DRESS SH	ΙΟV	/N IN	ITEM	25. OTI	IER THAN FL	JLL AND OPI	EN COMPETI	TION PURS	UANT TO
(4 copies unless otherwise specified)				J.S.C. 2304(c	)	41 U.S.C	253(c)					
26. ADMINIST	TEREC	) BY	COL	DE	1	<del></del>	27. PAY	MENT WILL	BE MADE BY	/: CODE		
						····	<del></del>				L	
	·······	·	CONT	RA:	CTING OFFI	CER WILL CO	MPLETE ITE	M 28 OR 29	AS APPLICA	BLE		
28. NEGO	TIATE	D AGREE			or is required to					quired to sign this	document.)	
document and re	eturn	copies	to issuing offic	e.)	Contractor	agrees	Your offe	on this solicitation	on, is hereby acc	cepted as to the it	ems listed. Thi	s award con-
to furnish and de on this form and		· ·		•		hio				a) the Governme		nd
contract. The rig	-						your offer necessar		tract award. No	further contractua	l document is	
governed by (a)			•			•						
representations, ence in or attach		-	ecifications or i	ncor	porated by refer	г-	i					
30A. NAME A	ND TI	TLE OF CO	ONTRACTO	R C	R PERSON	AUTHORIZED	31A. NAI	E OF CONTRAC	TING OFFICE	R (Typ	e or print	)
TO SIGN (Ty	pe or p	rint)										
30B. SIGNAT	URE		Т	300	C. DATE		TEL:		EM	AIL:		
				•			31B. UN	ITED STATE	S OF AMERI	CA	31C. A	WARD DATE
							BY					

# Section 00010 - Solicitation Contract Form

ITEM NO 0001	SUPPLIES/SERVICES  MOBILIZATION & DEM	QUANTITY 1 OBILIZATION	UNIT Lump Sum	UNIT PRICE N/A	\$ AMOUNT
ITEM NO	SUPPLIES/SERVICES				
0002	MAINTENANCE DREDO WITH OCEAN DISPOSA		ED MATERIAL	,	
ITEM NO 0002AA	SUPPLIES/SERVICES FIRST 143,100 CY	QUANTITY 143,100	UNIT Cubic Yard	UNIT PRICE	\$ AMOUNT
ITEM NO 0002AB	SUPPLIES/SERVICES  OVER 143,100 CY	QUANTITY 234,600	UNIT Cubic Yard	UNIT PRICE	\$ AMOUNT
	TOTAL ESTIM	IATED AMOUN	г \$		

#### NOTE:

Note: Item Number 0002 is subdivided into two estimated quantities and are to be separately priced. The Government will evaluate this item on the basis of the total price of its sub-items. See SPECIAL CONTRACT REQUIREMENTS, Clause "VARIATIONS IN ESTIMATED QUANTITIES – SUBDIVIDED ITEMS" (EFAR 52.211-5001).

#### Section 00100 - Bidding Schedule/Instructions to Bidders

# CLAUSES INCORPORATED BY REFERENCE

52.214-3	Amendments To Invitations For Bids	DEC 1989
52.214-4	False Statements In Bids	APR 1984
52.214-5	Submission Of Bids	MAR 1997
52.214-6	Explanation To Prospective Bidders	APR 1984
52.214-7	Late Submissions, Modifications, and Withdrawals of Bids	NOV 1999
52.214-18	Preparation of Bids-Construction	APR 1984
52.214-19	Contract Award-Sealed Bidding-Construction	AUG 1996
52.225-10	Notice of Buy American Act RequirementConstruction  Materials	MAY 2002
52.232-38	Submission of Electronic Funds Transfer Information with Offer	MAY 1999

#### CLAUSES INCORPORATED BY FULL TEXT

#### 52.003-4002 BIDS RECEIVING DESK

Bids, if submitted in person or by messenger, shall be delivered to the Bids Receiving Desk (so identified), Building 1, Contracts Branch, Contracting Division, at the above address, prior to the time fixed for opening of bids. Bidders who attend the bid opening may deliver bids directly to the Contracting Officer in the New Hampshire Conference Room.

#### 52.003-4014 INQUIRIES

Telephone inquiries relating to this solicitation should be directed as follows:

#### 52.003-4015 MAGNITUDE OF PROJECT

The estimated cost of the work is between \$1,000,000.00 and \$5,000,000.00.

# 52.003-4021 PLACE OF BID OPENING

Bids will be publicly opened at the appointed time at the U. S. Army Engineer District, New England, 696 Virginia Road, Concord, MA 01742-2751, in the New Hampshire Conference Room.

# 52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a firm fixed price contract resulting from this solicitation.

(End of clause)

#### 52.233-2 SERVICE OF PROTEST (AUG 1996)

- (a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from Contracting Officer, U.S. Army Corps of Engineer District 696 Virginia Road, Concord, MA 01742-2751.
- (b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

# 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

http://www.arnet.gov/far

http://farsite.hill.af.mil

http://www.hq.usace.army.mil/cepr/asp/library/efar.asp

http://acqnet.saalt.army.mil/LIBRARY

(End of provision)

Section 00600 - Representations & Certifications

#### CLAUSES INCORPORATED BY FULL TEXT

# 52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

Government entity (Federal, State, or local);

(a) Definitions.

Common parent, as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

Taxpayer Identification Number (TIN), as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

- (b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.
- (c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).
TIN:,
TIN has been applied for.
TIN is not required because:
Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;
Offeror is an agency or instrumentality of a foreign government;
Offeror is an agency or instrumentality of the Federal Government.
(e) Type of organization.
Sole proprietorship;
Partnership;
Corporate entity (not tax-exempt);
Corporate entity (tax-exempt);

F	oreign government;
Ir	aternational organization per 26 CFR 1.6049-4;
0	ther
(f) Cor	nmon parent.
0	fferor is not owned or controlled by a common parent as defined in paragraph (a) of this provision.
	ame and TIN of common parent:
Name-	
TIN	
(End o	f provision)
52.204	-3 TAXPAYER IDENTIFICATION (OCT 1998)
(a) Def	initions.
Comme	on parent, as used in this provision, means that corporate entity that owns or controls an affiliated group of ations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member of the control of the co
Service	ver Identification Number (TIN), as used in this provision, means the number required by the Internal Reversity (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social y Number or an Employer Identification Number.
debt co and 60: reporting	offerors must submit the information required in paragraphs (d) through (f) of this provision to comply willection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041 50M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment agrequirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the of ish the information may result in a 31 percent reduction of payments otherwise due under the contract.
offeror reportii	TIN may be used by the Government to collect and report on any delinquent amounts arising out of the s relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the paying requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records the accuracy of the offeror's TIN.
(d) Tax	payer Identification Number (TIN).
TI	N:
Tl	N has been applied for.
T	N is not required because:
Or	fferor is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectited with the conduct of a trade or business in the United States and does not have an office or place of as or a fiscal paying agent in the United States;

	Offeror is an agency or instrumentality of a foreign government;
	Offeror is an agency or instrumentality of the Federal Government.
(e) '	Type of organization.
	Sole proprietorship;
	Partnership;
	Corporate entity (not tax-exempt);
	Corporate entity (tax-exempt);
	Government entity (Federal, State, or local);
	Foreign government;
	International organization per 26 CFR 1.6049-4;
	Other
(f) (	Common parent.
	Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.
	Name and TIN of common parent:
Nan	1¢
TIN	
(Enc	l of provision)
(	
52.2	04-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2005)
(a)(1 prov	1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (b) of this rision applies.
com	f the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has pleted the ORCA electronically, the offeror may choose to use paragraph (b) of this provision instead of pleting the corresponding individual representations and certifications in the solicitation. The offeror shall cate which option applies by checking one of the following boxes:
	Paragraph (b) applies.
	Paragraph (b) does not apply and the offeror has completed the individual representations and certifications in colicitation.
(b) T Repr	The offeror has completed the annual representations and certifications electronically via the Online resentations and Certifications Application (ORCA) website at http://orca.bpn.gov. After reviewing the ORCA

database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [offeror to insert changes, identifying change by clause number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of Provision)

- 52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (JUL 2005)
- (a) Definition. HUBZone small business concern, as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.
- (b) Evaluation preference. (1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except--
- (i) Offers from HUBZone small business concerns that have not waived the evaluation preference; and
- (ii) Otherwise successful offers from small business concerns.
- (2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.
- (3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer.

These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

- (c) Waiver of evaluation preference. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.
- \_\_\_\_ Offeror elects to waive the evaluation preference.
- (d) Agreement. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for

- (1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;
- (2) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;
- (3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns; or
- (4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.
- (e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants.
- (f) A HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

#### 52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)

The offeror represents that --

- (a) ( ) It has, ( ) has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;
- (b) ( ) It has, ( ) has not, filed all required compliance reports; and
- (c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

(End of provision)

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (SEP 2004)

(a) "Definitions."

As used in this provision --

- (a) "Government of a terrorist country" includes the state and the government of a terrorist country, as well as any political subdivision, agency, or instrumentality thereof.
- (2) "Terrorist country" means a country determined by the Secretary of State, under section 6(j)(1)(A) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)(i)(A)), to be a country the government of which has repeatedly provided support for such acts of international terrorism. As of the date of this provision, terrorist countries subject to this provision include: Cuba, Iran, Libya, North Korea, Sudan, and Syria.

- (3) "Significant interest" means --
- (i) Ownership of or beneficial interest in 5 percent or more of the firm's or subsidiary's securities. Beneficial interest includes holding 5 percent or more of any class of the firm's securities in "nominee shares," "street names," or some other method of holding securities that does not disclose the beneficial owner;
- (ii) Holding a management position in the firm, such as a director or officer;
- (iii) Ability to control or influence the election, appointment, or tenure of directors or officers in the firm;
- (iv) Ownership of 10 percent or more of the assets of a firm such as equipment, buildings, real estate, or other tangible assets of the firm; or
- (v) Holding 50 percent or more of the indebtness of a firm.
- (b) "Prohibition on award."

In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns the subsidiary, unless a waiver is granted by the Secretary of Defense.

(c) "Disclosure."

If the government of a terrorist country has a significant interest in the Offeror or a subsidiary of the Offeror, the Offeror shall disclosure such interest in an attachment to its offer. If the Offeror is a subsidiary, it shall also disclose any significant interest the government of a terrorist country has in any firm that owns or controls the subsidiary. The disclosure shall include --

- (1) Identification of each government holding a significant interest; and
- (2) A description of the significant interest held by each government.

(End of provision)

#### 252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 2005)

- (a) Definitions. As used in this provision--
- (1) Foreign person means any person (including any individual, partnership, corporation, or other form of association) other than a United States person.
- (2) United States means the 50 States, the District of Columbia, outlying areas, and the outer Continental Shelf as defined in 43 U.S.C. 1331.
- (3) United States person is defined in 50 U.S.C. App. 2415(2) and means-
- (i) Any United States resident or national (other than an individual resident outside the United States who is employed by other than a United States person);
- (ii) Any domestic concern (including any permanent domestic establishment of any foreign concern); and

- (iii) Any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern that is controlled in fact by such domestic concern.
- (b) Certification. If the offeror is a foreign person, the offeror certifies, by submission of an offer, that it-
- (1) Does not comply with the Secondary Arab Boycott of Israel; and
- (2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. 2407(a) prohibits a United States person from taking.

(End of provision)

# 252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

- (a) The Offeror shall indicate by checking the appropriate blank in paragraph (b) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term supplies is defined in the Transportation of Supplies by Sea clause of this solicitation.
- (b) Representation. The Offeror represents that it:
- \_\_\_\_(1) Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
- \_\_\_\_(2) Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.
- (c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

(End of provision)

# Section 00700 - Contract Clauses

# CLAUSES INCORPORATED BY REFERENCE

52.202-1	Definitions	JUL 2004
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or	JAN 1997
	Improper Activity	
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	JAN 1997
 52.203-12	Limitation On Payments To Influence Certain Federal	JUN 2003
	Transactions	
52.204-4	Printed or Copied Double-Sided on Recycled Paper	AUG 2000
52.204-7	Central Contractor Registration	OCT 2003
52.209-6	Protecting the Government's Interest When Subcontracting	JAN 2005
	With Contractors Debarred, Suspended, or Proposed for	
	Debarment	
52.211-13	Time Extensions	SEP 2000
52.211-18	Variation in Estimated Quantity	APR 1984
52.214-26	Audit and RecordsSealed Bidding	OCT 1997
52.214-27	Price Reduction for Defective Cost or Pricing Data -	OCT 1997
	Modifications - Sealed Bidding	0011,,,
52.214-28		OCT 1997
	Bidding	
52.219-4	Notice of Price Evaluation Preference for HUBZone Small	JUL 2005
	Business Concerns	0022003
52.219-8	Utilization of Small Business Concerns	MAY 2004
52.219-9 Alt I	Small Business Subcontracting Plan (Jul 2005) Alternate I	OCT 2001
52.219-16	Liquidated Damages-Subcontracting Plan	JAN 1999
52.219-25	Small Disadvantaged Business Participation Program	OCT 1999
	Disadvantaged Status and Reporting	001 1
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards Act - Overtime	JUL 2005
	Compensation	
52.222-6	Davis Bacon Act	JUL 2005
52.222-7	7771.4.1.4.1.1	FEB 1988
52.222-8	The state of the s	FEB 1988
52.222-9		JUL 2005
52.222-10		FEB 1988
52.222-11	Subcontracts (Labor Standards)	JUL 2005
52.222-12		FEB 1988
52.222-13		FEB 1988
52.222-14		FEB 1988
52.222-15	CI II AMERICAN IN THE SECOND I	FEB 1988
52.222-21		FEB 1999
52.222-26	Equal Opportunity	APR 2002
52.222-27		FEB 1999
	Construction	,,,
52.222-35		DEC 2001
	of the Vietnam Era, and Other Eligible Veterans	
52.222-36		JUN 1998
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52.222-37	Employment Reports On Special Disabled Veterans, Veterar	s DEC 2001
	Of The Vietnam Era, and Other Eligible Veterans	15 DEC 2001
52.223-6	Drug-Free Workplace	MAY 2001
52.223-14	Toxic Chemical Release Reporting	AUG 2003
52.225-13	Restrictions on Certain Foreign Purchases	MAR 2005
52.226-1	Utilization Of Indian Organizations And Indian-Owned	JUN 2000
	Economic Enterprises	00112000
52.227-1	Authorization and Consent	JUL 1995
52.227-2	Notice And Assistance Regarding Patent And Copyright	AUG 1996
	Infringement	11001)
52.227-4	Patent Indemnity-Construction Contracts	APR 1984
52.228-2	Additional Bond Security	OCT 1997
 52.228-11	Pledges Of Assets	FEB 1992
52.228-12	Prospective Subcontractor Requests for Bonds	OCT 1995
52.228-13	Alternative Payment Protections	JUL 2000
52.228-14	Irrevocable Letter of Credit	DEC 1999
52.228-15	Performance and Payment BondsConstruction	JUL 2000
52.229-3	Federal, State And Local Taxes	APR 2003
52.232-5	Payments under Fixed-Price Construction Contracts	SEP 2002
52.232-17	Interest	JUN 1996
52.232-23 Alt I	Assignment of Claims (Jan 1986) - Alternate I	APR 1984
52.232-27	Prompt Payment for Construction Contracts	OCT 2003
52.232-33	Payment by Electronic Funds TransferCentral Contractor	OCT 2003
	Registration	
52.233-1	Disputes	JUL 2002
52.233-3	Protest After Award	AUG 1996
52.236-2	Differing Site Conditions	APR 1984
52.236-3	Site Investigation and Conditions Affecting the Work	APR 1984
52.236-4	Physical Data	APR 1984
52.236-5	Material and Workmanship	APR 1984
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52.236-7	Permits and Responsibilities	NOV 1991
52.236-8	Other Contracts	APR 1984
52.236-9	Protection of Existing Vegetation, Structures, Equipment,	APR 1984
	Utilities, and Improvements	
52.236-10	Operations and Storage Areas	APR 1984
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52.236-12	Cleaning Up	APR 1984
52.236-13	Accident Prevention	NOV 1991
52.236-15	Schedules for Construction Contracts	APR 1984
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52.236-17	Layout of Work	APR 1984
52.236-21	Specifications and Drawings for Construction	FEB 1997
52.236-26	Preconstruction Conference	FEB 1995
52.242-13	Bankruptcy	JUL 1995
52.242-14	Suspension of Work	APR 1984
52.243-4	Changes	AUG 1987
52.244-6	Subcontracts for Commercial Items	DEC 2004
52.246-12	Inspection of Construction	AUG 1996
52.248-3	Value Engineering-Construction	FEB 2000
52.249-2 Alt I	Termination for Convenience of the Government (Fixed-Price) (May 2004) - Alternate I	SEP 1996
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.253-1	Computer Generated Forms	JAN 1991

252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-	DEC 2004
	Contract-Related Felonies	
252.203-7002	Display Of DOD Hotline Poster	DEC 1991
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004 Alt A	Central Contractor Registration (52.204-7) Alternate A	NOV 2003
252.205-7000	Provision Of Information To Cooperative Agreement Holders	DEC 1991
252.209-7004	Subcontracting With Firms That Are Owned or Controlled By	
	The Government of a Terrorist Country	
252.219-7003	Small, Small Disadvantaged and Women-Owned Small	APR 1996
	Business Subcontracting Plan (DOD Contracts)	
252.223-7004	Drug Free Work Force	SEP 1988
252.225-7012	Preference For Certain Domestic Commodities	JUN 2004
252.227-7033	Rights in Shop Drawings	APR 1966
252.231-7000	Supplemental Cost Principles	DEC 1991
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.236-7001	Contract Drawings, and Specifications	AUG 2000
252.236-7002	Obstruction of Navigable Waterways	DEC 1991
252.236-7008	Contract Prices-Bidding Schedules	DEC 1991
252.242-7000	Postaward Conference	DEC 1991
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	MAR 1998
252.247-7023	Transportation of Supplies by Sea	MAY 2002
252.247-7024	Notification Of Transportation Of Supplies By Sea	MAR 2000
	<u> </u>	

#### CLAUSES INCORPORATED BY FULL TEXT

# 52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

- (a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.
- (b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
4.0%	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout

the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

- (d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --
- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract;
- (4) Estimated starting and completion dates of the subcontract; and
- (5) Geographical area in which the subcontract is to be performed.
- (e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is Weymouth, Massachusetts Norfolk County

(End of provision)

# 52.225-9 BUY AMERICAN ACT—CONSTRUCTION MATERIALS (JAN 2005)

(a) Definitions. As used in this clause--

Component means an article, material, or supply incorporated directly into a construction material.

Construction material means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

- (1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or
- (2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

Domestic construction material means--

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

United States means the 50 States, the District of Columbia, and outlying areas.

- (b) Domestic preference. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.
- (2) This requirement does not apply to the construction material or components listed by the Government as follows:

#### NONE

- (3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that
- (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;
- (ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or
- (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.
- (c) Request for determination of inapplicability of the Buy American Act. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including-
- (A) A description of the foreign and domestic construction materials;
- (B) Unit of measure;
- (C) Quantity;
- (D) Price;
- (E) Time of delivery or availability;
- (F) Location of the construction project;
- (G) Name and address of the proposed supplier; and
- (H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

- (ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.
- (iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).
- (iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.
- (2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.
- (3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.
- (d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

# 

# 52.227-5001 PARTICIPATION OF FOREIGN NATIONALS IN USACE CONTRACTS

(End of clause)

All contractor employees (U.S. Citizens and Non-U.S. Citizens) working under this contract who require access to Automated Information Systems (AIS), (stand alone computers, network computers/systems, email) shall, at a minimum, be designated into an ADP-III position (non sensitive) in accordance with DoD 5220-22-R, Industrial Security Regulation. The investigative requirements for an ADP – III position are favorable National Agency Check (NAC), SF-85P, Public Trust Position. The contractor shall have each applicable employee complete a SF-85P and submit to the U.S. Army Engineer District, New England, 696 Virginia Road, Concord, MA 01742-2751, Security Officer, within three (3) working days after award of any contract or task order, and shall be submitted prior to the

individual being permitted to access AIS. Contractors that have a commercial or government entity (CAGE) Code and Facility Security Clearance through the Defense Security Service shall process the NAC's and forward visit requests/results of NAC to the U.S. Army Engineer District, New England, 696 Virginia Road, Concord, MA 01742-2751 – Security Officer. For those contractors that do not have a Cage Code or Facility Security Clearance, the U.S. Army Engineer District, New England – Bldg 1, 696 Virginia Road, Concord, MA 01742-2751, Security Officer will process the investigation in coordination with the Contractor and contract employees.

In accordance with Engineering Regulation, ER-380-1-18, Section 4, foreign nationals who work on Corps of Engineers' contracts or task orders shall be approved by HQUSACE Foreign Disclosure Officer or higher before beginning work on the contract/task order. This regulation includes subcontractor employees. (NOTE: exceptions to the above requirement include foreign nationals who perform janitorial and/or grounds maintenance services.) The contractor shall submit to the U.S. Army Engineer District, New England, Contracting Division, the names of all foreign nationals proposed for performance under this contract/task order, along with documentation to verify that he/she was legally admitted into the United States and has authority to work and/or go to school in the US. Such documentation may include a U.S. Passport, Certificate of U.S. Citizenship (INS Form N-560 or N-561), Certificate of Naturalization (INS Form N-550 or N-570), foreign passport with I-551 stamp or attached INS From I-94 indicating employment authorization, Alien Registration Receipt Card with photograph (INS From I-151 or I-551), Temporary Resident Card (INS From I688), Employment Authorization Card (INS Form I-688A), Reentry Permit (INS Form I-327), Refugee Travel Document (INS From I-571), Employment Authorization Document issued by INS which contains a photograph (INS Form I-688B).

# 52.231-5000 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE MAR 1995)--EFARS

- (a) This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals and FAR Part 49.
- (b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule, Region \_\_1\_. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.
- (c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.
- (d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(End of clause)

# 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

http://www.arnet.gov/far http://farsite.hill.af.mil http://www.hq.usace.army.mil/cepr/asp/library/efar.asp http://acqnet.saalt.army.mil/LIBRARY

(End of clause)

Section 00800 - Special Contract Requirements

# **WAGE DETERMINATION**

General Decision Number: MA030016 05/06/2005 MA16

Superseded General Decision Number: MA020016

State: Massachusetts

Construction Types: Heavy Dredging

Counties: Massachusetts Statewide.

STATEWIDE

Massacusetts All Dredging, except self-propelled hopper dredges, on the Atlantic Coast & tributary waters emptying into the Atlantic Ocean.

# Modification Number Publication Date

0 06/13/2003

1 12/17/2004

2 05/06/2005

#### **STATEWIDE**

Rates Fringes

Company Lead Dredgeman
Lead Dredgeman\$ 28.97 7.80+a+b
Dipper & Clamshell Dredge
Boat Captain\$ 23.05 7.20+a+b
Boat Master\$ 24.14 7.80+a+b
Deckhand, Tug Deckhand\$ 18.83 6.60+a+b
Engineer\$ 25.37 7.80+a+b
Maintenance Engineer\$ 24.49 7.20+a+b
Mate\$ 22.89 7.20+a+b
Oiler\$ 19.29 6.60+a+b
Operator\$ 28.97 7.80+a+b
Scowman\$ 18.78 6.60+a+b
Welder\$ 24.12 7.20+a+b
Diver
Diver\$ 41.53 6.87+a+b
Standby Diver\$ 27.85 6.87+a+b
Standby Tender\$ 23.26 6.27+a+b
Tender\$ 32.11 6.87+a+b
Drag Bucket Dredge
Deckhand\$ 16.17 5.25+a+b
Engineer\$ 21.41 6.45+a+b
Maintenance Engineer\$ 21.21 5.85+a+b
Mate\$ 19.82 5.85+a+b
Operator\$ 25.09 6.45+a+b
Dredging Pipeline Cable-Laying

<sup>\*</sup> ENGI0025-001 10/01/2004

Control Tower Operator\$ 25	6.55 6.87+a+b
Diver Tender\$ 26.58	6.87+a+b
Diver Tender\$ 26.58 Diver\$ 42.42	6.87+a+b
Leverman\$ 28.83	6.87+a+h
Line up Operator, End Prep\$ 1	
Rigger\$ 19.07	
Drill Boats	3.07±a±0
	~ 4 <del>~</del>
Blaster\$ 23.81	6.45+a+b
Core Driller\$ 19.00	5.25+a+b
Driller\$ 23.55	6.45+a+b
Engineer\$ 23.54	6.45+a+b
Machinist\$ 23.30	5.85+a+b
Oiler\$ 20.46	5.25+a+b
Tug Captain\$ 19.53	5.85+a+b
Tug Deckhand\$ 15.97	5.25+a+b
Tug Master\$ 20.48	6.45+a+b
Welder\$ 23.30	5.85+a+b
Engineer	
1st\$ 25.55	5.87+a+b
2nd, 3rd and 4th\$ 25.23	
Electrician\$ 25.68	
Electro Hydro Technician\$ 20	
Tug Captain\$ 23.44	
Tug Master\$ 26.80	6.87+a+b
Hydraulic Dredge	0.67±a±0
	7.00 1
Asst. Fill Placer\$ 22.70	7.80+a+b
Boat Captain\$ 23.05	7.20+a+b
Boat Master\$ 24.13	7.80 + a + b
Chief Mate\$ 24.72	7.80+a+b
Chief Welder\$ 25.38	7.80+a+b
Deckhand\$ 19.23	6.60+a+b
Engineer\$ 24.82	7.80 + a + b
Fill Placer\$ 24.72	7.80+a+b
Janitor/Porter\$ 18.39	6.60+a+b
Leverman\$ 28.97	7.80 + a + b
Maintenance Engineer\$ 24.	49 7.20+a+b
Mate\$ 22.89	7.20+a+b
Messman\$ 18.39	6.60+a+b
Night Cook\$ 18.90	6.60+a+b
	6.60+a+b
Shoreman\$ 18.80	6.60+a+b
Spider Barge Operator\$ 23.9	
Steward\$ 22.84	7.80+a+b
Welder-Dredge\$ 24.11	7.20+a+b
Tug Boats over 1000 H.P.	7.20 - 4 - 0
with master or captain	
having license endorsed	
for 200 miles off shore	
	7 901615
Tug Captain\$ 24.59	7.80+a+b
Tug Chief Engineer\$ 23.83	
Tug Deckhand\$ 19.23	6.60+a+b
Tug Engineer\$ 23.38	7.20+a+b

PREMIUMS: Additional 20% for hazardous material work

#### FOOTNOTES APPLICABLE TO ABOVE CRAFTS:

- a. PAID HOLIDAYS: New Year's Day, Martin Luther King, Jr.'s Birthday, Memorial Day, Good Friday, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day
- b. VACATION: Seven percent (7%) of the straight time rate multiplied by the total hours worked.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

#### WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

General Decision Number MA030011 06/13/2003 MA11

Superseded General Decision No. MA020011

State: Massachusetts

Construction Type: DREDGING

County(ies):

BARNSTABLE ESSE

ESSEX PLYMOUTH

BRISTOL N

NANTUCKET

SUFFOLK

DUKES NORFOLK

#### HOPPER DREDGE CONSTRUCTION PROJECTS

Modification Number Publication Date 0 06/13/2003

COUNTY(ies):

BARNSTABLE

**ESSEX** 

**PLYMOUTH** 

BRISTOL

NANTUCKET

SUFFOLK

DUKES

NORFOLK

SUMA2001A 05/24/1993

Rates

Fringes

#### SELF-PROPELLED HOPPER DREDGES:

Drag Tenders

8.21

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

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of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U. S. Department of Labor 200 Constitution Avenue, N. W. Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final. END OF GENERAL DECISION

# PLANT AND EQUIPMENT LIST

The bidder must complete the following plant and equipment list by listing the plant available to the Bidder and proposed to be used on the work of this contract. Add additional pages as necessary. Attach the completed list to the BIDDING SCHEDULE and submit the list with the bid. Failure to complete this list and submit it with the BIDDING SCHEDULE may be cause for the rejection of the bid. Prior to commencement of work at the site, the Contractor will be required to submit for review copies of all applicable current inspections, certificates and surveys for all floating plant

# BUCKET DREDGES (Clamshell/Dipper/Excavator/Dragline)

Dredge Name and	Manufacturer and	Bucket Size and	Capacity – Cubic	Type and HP of
Type	Age	Swings/Hour	Yards/Month*	Engine

# HYDRAULIC/SUCTION/HOPPER DREDGE

Dredge Name and	Manufacturer and	Inside Diameter of	Capacity – Cubic	Type and HP of
Type	Age	Discharge Pipe	Yards/Month*	Pump Engine

# BARGES/SCOWS

Name	Manufacturer	Length	Draft -	Draft –	Capacity	Number and Size
And	And Age	&	Light	Loaded	(Cubic Yards)	Of Drills
Type		Beam				

# ATTENDANT PLANT (Give columnar information pertinent to items listed, if to be used)

	Name	Manufacturer And Age	Type and HP Of Engine	Length & Beam	Remarks
Tug					
Tug					
Launch					

<sup>(\*)</sup> When working materials similar to those anticipated to be encountered in the performance of work

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- 01451 CONTRACTOR QUALITY CONTROL
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#### 02325 DREDGING

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#### SECTION 00800

#### SPECIAL CONTRACT REQUIREMENTS

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#### SECTION 00800

#### SPECIAL CONTRACT REQUIREMENTS

- 1.1 COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK (APR 1984) FAR 52.211-10
  - a. The Contractor shall be required to--
    - (1) commence work under this contract within 15 calendar days after the date the Contractor receives the notice to proceed,
    - (2) prosecute the work diligently, and
    - (3) complete the entire work ready for use not later than 120 calendar days after the date the Contractor receives notice to proceed. The time stated for completion shall include final cleanup of the premises.
  - b. Due to environmental restrictions, dredging operations at the project site will only be permitted from November 15 through March 15 inclusive, of any year. In the event that notice to proceed is issued when dredging at the site is not permitted, the Contractor shall promptly place all orders, award subcontracts, process required submittals and details to ensure effective action when construction operations at the site are required to commence. Actual dredging operations at the site shall commence within 15 days after receipt of notice to proceed and after November 14, 2005.
- 1.2 LIQUIDATED DAMAGES CONSTRUCTION (Sept 2000) FAR 52.211-12
  - (a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$650.00 for each calendar day of delay until the work is completed or accepted.
  - (b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.
- 1.3 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000) DFARS 252.236-7001
  - (a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference The drawings will be provided to the Contractor in electronic or paper media as chosen by the Contracting Officer.
  - (b) The Contractor shall-
    - (1) Check all drawings furnished immediately upon receipt;
    - (2) Compare all drawings and verify the figures before laying out the

work;

- (3) Promptly notify the Contracting Officer of any discrepancies;
- (4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and
- (5) Reproduce and print contract drawings and specifications as needed.
- (c) In general--
  - (1) Large-scale drawings shall govern small-scale drawings; and
  - (2) The Contractor shall follow figures marked on drawings in preference to scale measurements.
- (d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.
- (e) The work shall conform to the specifications, and to the contract drawings identified on the following index of drawings:

Sheet	Drawing	
No.	File No.	Title
		MAINTENANCE DREDGING 35 - FOOT MAIN CHANNEL AND TURNING BASIN & MANEUVERING AREA
		WEYMOUTH, QUINCY AND HULL MASSACHUSETTS
2 C-1	WFR-432	Key Plan, Location Map, General Notes, Tidal Datum, Legend and Index to Drawings

#### 1.4 DESIGNATED BILLING OFFICE

Reference Contract Clause titled "PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS" located in SECTION 00700, CONTRACT CLAUSES. The "designated billing office" will be the Construction Area Engineer, Resident Engineer or project office where the Contracting Officer Representative for this contract is located. The Contractor will be notified of the exact location of this office at the project preconstruction conference specified in Section 01110 SUMMARY OF WORK.

#### 1.5 BID GUARANTEE (SEP 1996) FAR 52.228-1

- (a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.
  - (b) The bidder shall furnish a bid quarantee in the form of a firm

commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.

- (c) The amount of the bid guarantee shall be twenty percent of the bid price or \$3,000,000, whichever is less.
- (d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.
- (e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.
- 1.6 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984) FAR 52.236-1

The Contractor shall perform on the site, and with its own organization, work equivalent to at least twenty percent (20%) of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

- 1.7 OBSTRUCTION OF NAVIGABLE WATERWAYS DFAR 252.236-7002(DEC 1991)
  - (a) The Contractor shall-
    - (1) Promptly recover and remove any material, plant, machinery, or appliance which the contractor loses, dumps, throws overboard, sinks, or misplaces, and which, in the opinion of the Contracting Officer, may be dangerous to or obstruct navigation;
    - (2) Give immediate notice, with description and locations of any such obstructions, to the Contracting Officer; and
    - (3) When required by the Contracting Officer, mark or buoy such obstructions until the same are removed.
  - (b) The Contracting Officer may-
    - (1) Remove the obstructions by contract or otherwise should the Contractor refuse, neglect, or delay compliance with paragraph (a) of this clause; and
    - (2) Deduct the cost of removal from any monies due or to become due to the Contractor; or
    - (3) Recover the cost of removal under the Contractor's bond.
  - (c) The Contractor's liability for the removal of a vessel wrecked or sunk

without fault or negligence is limited to that provided in Sections 15, 19, and 20 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 410 et.seq.).

- 1.8 PAYMENT FOR MOBILIZATION AND DEMOBILIZATION (DEC 1991) DFARS 252.236-7004.
  - a. The Government will pay all costs for the mobilization and demobilization of all of the Contractor's plant and equipment at the contract lump sum price for this item.
    - (1) Sixty percent of the lump sum price upon completion of the Contractor's mobilization at the work site.
    - (2) The remaining 40 percent upon completion of demobilization.
  - b. The Contracting Officer may require the Contractor to furnish cost data to justify this portion of the bid if the Contracting Officer believes that the percentages in paragraphs a(1) and a(2) of this clause do not bear a reasonable relation to the cost of the work in this contract.
    - (1) Failure to justify such price to the satisfaction of the Contracting Officer will result in payment, as determined by the Contracting Officer, of --
      - (i) Actual mobilization costs at completion of mobilization;
      - (ii) Actual demobilization costs at completion of demobilization; and
      - $(\mbox{iii})$  The remainder of this item in the final payment under this contract.
    - (2) The Contracting Officer's determination of the actual costs in paragraph b(1) of this clause is not subject to appeal.
- 1.9 QUANTITY SURVEYS. (APR 1984) ALTERNATE 1 FAR 52.236-16
  - a) Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.
  - (b) The Government shall conduct the original and final surveys and make the computations based on them. The Contractor shall conduct the surveys for any periods for which progress payments are requested and shall make the computations based on these surveys. All surveys conducted by the Contractor shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance.
  - (c) Promptly upon completing a survey, the Contractor shall furnish the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer, who shall use them as necessary to determine the amount of progress payments. The Contractor shall retain copies of all such material furnished to the Contracting Officer.

1.10 VARIATIONS IN ESTIMATED QUANTITIES — SUBDIVIDED ITEMS (MAR 1995) — EFARS 52.211-5001

This variation in estimated quantities clause is applicable only to Item  ${\tt No.~0002.}$ 

- (a) Variation from the estimated quantity in the actual work performed under any second or subsequent sub-item or elimination of all work under such a second or subsequent sub-item will not be the basis for an adjustment in contract unit price.
- (b) Where the actual quantity of work performed for Item No. 0002 is less than 85% of the quantity of the first sub-item listed under such item, the contractor will be paid at the contract unit price for that sub-item for the actual quantity of work performed and, in addition, an equitable adjustment shall be made in accordance with the clause FAR 52.211-18, Variation in Estimated Quantities.
- (c) If the actual quantity of work performed under Item No. 0002 exceeds 115% or is less than 85% of the total estimated quantity of the sub-item under that item and/or if the quantity of the work performed under the second sub-item or any subsequent sub-item under Item No 0002 exceeds 115% or is less than 85% of the estimated quantity of any such sub-item, and if such variation causes an increase or a decrease in the time required for performance of this contract the contract completion time will be adjusted in accordance with the clause FAR 52.211-18, Variation in Estimated Quantities.
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#### SECTION 01110

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# PART 2 PRODUCTS (Not Applicable)

#### PART 3 EXECUTION (Not Applicable)

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#### SECTION 01110

#### SUMMARY OF WORK

#### PART 1 GENERAL

#### 1.1 WORK COVERED BY CONTRACT DOCUMENTS

The general description below is given to indicate the <u>approximate</u> scope of this project only. It does not limit the work required under the project drawings and specifications.

The work of this project consists of maintenance dredging of approximately 378,000 cy from the 35-foot channel of the Fore River Channel and Kings Cove maneuvering area. Dredged material will be removed mechanically by an enclosed clamshell bucket and barges or by hopper dredge at the Contractor's option. Due to the presence of boulders and possible hard digging, hopper dredges alone will not be suitable for dredging all areas of the project. Also hard material located in the navigation channel near Georges's Island and off of Wessagussett Beach shall be removed with a conventional open tooth clamshell bucket bucket or backhoe. A backhoe on a barge or similar equipment shall be used to remove material underneath the Washington Street Bridge. Overflow of barges or hoppers while being filled or transported will not be permitted. Disposal of the dredged material will be at the Mass Bay Disposal Site. The disposal site is shown on a drawing attached at the end of Section 02325.

#### 1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

# SD-01 Preconstruction Submittals

Progress Schedule; G, RO.

In accordance with the contract clauses, the Contractor shall, within ten (10) days after receipt of notice to proceed or as otherwise determined by the Contracting Officer, submit for approval a practicable progress schedule. When changes are authorized that result in contract time extensions, Contractor shall submit a modified chart for approval by the Contracting Officer.

# 1.3 PROJECT/SITE CONDITIONS

#### 1.3.1 Physical Data

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

- a. Site Conditions: The indications of physical conditions on the drawings and in the specifications are the result of site investigations and surveys. The conditions represented prevailed at the time the investigations and surveys were made. Before commencing work at the site, the Contractor shall verify the existing conditions indicated on the drawings and in the specifications. See CONTRACT CLAUSE entitled "SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK."
- b. Weather Conditions: The monthly normal mean temperature and the monthly normal mean precipitation for the site may be obtained by the Contractor from the nearest U.S. National Weather Service Office.
- c. Conditions of Channel and Anchorage: Improvement dredging was last performed in 1981. Soundings shown on the contract drawings are the results of surveys conducted during the time period indicated and are believed to indicate existing conditions.
- f. Channel Traffic: The Channel and the Kings Cove Maneuvering area are used by large commercial vessels, including tankers, and small recreation and commercial craft, which may cause interference with contract operations. Consult with the Harbor Master to determine the extent of interference with contract operations. The Government will not undertake to keep the channel free from vessels or other obstructions, except to the extent of applicable regulations. The Contractor will be required to conduct the work in such a manner as to obstruct navigation as little as possible, and in the event the Contractor's plant so obstructs the channel as to make difficult or endanger the passage of any vessels, the plant shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable passage.

#### 1.4 SEQUENCING AND SCHEDULING

#### 1.4.1 Hours of Operations

The Contractor will be allowed to perform work 24 hours per day, seven days per week, including holidays, for the entire performance period.

# 1.4.2 Work Sequence

#### 1.4.3 General

There are certain essential criteria relative to the preparation of a work sequence and time schedule which the Contractor will be required to implement and follow during the prosecution of the work. See Section 02325 for the required order of work. Minor variations in the sequence of the items of work as approved may be made by the Contractor, provided such variations do not conflict with critical elements of the schedule. Proposed minor variations shall be noted on the progress charts submittal required by CONTRACT CLAUSE, entitled "SCHEDULES FOR CONSTRUCTION CONTRACTS." Variations shall be approved by the Contracting Officer prior to implementation.

#### 1.4.3.1 Progress Schedule

The progress schedule shall be in the form of a chart graphically indicating the sequence proposed to accomplish each work feature or operation. The chart shall be prepared to show the starting and completion dates of all work features on a linear horizontal time scale beginning with

date of Notice to Proceed and indicating calendar days to completion. Contractor shall indicate on the chart the important work features or operations that are critical to the timely overall completion of the project. Key dates for such important work features and portions of work features are milestone dates and shall be so indicated on the chart. This schedule will be the medium through which the timeliness of the Contractor's construction effort is appraised. Anticipated adverse weather delay days shall be included in the schedule.

#### 1.4.4 Organization at the Site

#### 1.4.4.1 General

The Contractor shall employ ample personnel and sufficient equipment to accomplish the work of this contract in the least amount of time, within the prosecution period specified in Section 00800 SPECIAL CONTRACT REQUIREMENTS, Paragraph 1.

#### 1.4.4.2 Rate of Progress

Should the Contractor fail to maintain a satisfactory rate of progress, the Contracting Officer may require that additional personnel and equipment be placed on the work and weekend and overtime work be performed, in order that the work be brought up to schedule and maintained.

#### 1.5 CONTRACTOR USE OF PREMISES

#### 1.5.1 Storage Areas

See Section 01500 TEMPORARY FACILITIES AND CONTROLS.

#### 1.5.1.1 Work Limits

The limits of work consist of the shoaled areas of the channel and anchorage as shown on the contract drawings and the side slope areas which must be dredged to obtain the required depth.

# 1.5.2 Contractor's Receipt of Supplies

The Contractor shall be responsible for all arrangements for the receipt of materials and supplies at the job site. Government personnel are not permitted to receive or sign for items delivered to the site.

# 1.5.3 Access to Work Site

Water access to the project site is limited as shown on the drawings.

#### 1.6 COORDINATION

#### 1.6.1 Public Notice

The Contractor shall notify the public of this dredging project approximately two weeks before commencement of dredging operations at the site. A brief description of the work to be performed and the intended schedule of dredging and disposal operations shall be published in a newspaper of general circulation in the areas adjacent to the dredging. The notice shall include the locations where the work is to be performed, including disposal routes, and the time sequence of events. The notice shall include the Contractor's point of contact and telephone number.

#### 1.6.2 Notice to Mariners

Before beginning dredging operations, the Contractor shall coordinate with the U.S. Coast Guard (USCG) to issue a "Notice to Mariners" regarding the work to be performed and the Contractor's proposed operations.

The Corps of Engineers and the USCG have agreed to phraseology when issuing navigational bulletins and notices. The information furnished shall be consistent with USCG Broadcast Notice to Mariners and Local Notice to Mariners. When requesting local USCG offices to issue navigational information for Corps of Engineers work involving marine construction, the following terminology shall be used, as applicable:

For cautionary areas: "Mariners are urged to use extreme caution in the area."

For dredging and work operations: "Mariners are urged to transit at their slowest safe speed to minimize wake and proceed with caution after passing arrangements have been made."

#### 1.6.3 Aids to Navigation

Aids to navigation have been placed by the Coast Guard. The Contractor shall coordinate with the Coast Guard in advance of any dredging work to provide for any necessary relocation or movement of aids to navigation. The Contractor shall also contact the Coast Guard at the completion of all work and the removal of all dredging plant from the Harbor.

# 1.6.4 Points of Contact

- a. Coast Guard: John Mauro (617) 223-8355.
- b. Harbor Master: Paul Milone (781) 682-6109 or cell at (617) 947-5667.

#### 1.7 PRECONSTRUCTION CONFERENCE

The Contracting Officer will conduct a preconstruction conference with key Contractor personnel. The purpose of the conference is to review contract requirements and to establish a working relationship between the Contractor's Staff and the Corps Of Engineers personnel who will be closely associated with the project. During the conference, the Contracting Officer will inform the Contractor concerning Job Safety, Quality Control, Labor Relations, and Environmental Protection. The Contractor's Superintendent and Quality Control Representative shall attend this conference. All submittals which are ready for submission prior to start of work may be brought to the conference and given to the Contracting Officer's representative.

- PART 2 PRODUCTS (Not Applicable)
- PART 3 EXECUTION (Not Applicable)
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#### SECTION 01270

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#### SECTION 01270

#### MEASUREMENT AND PAYMENT

# PART 1 GENERAL

1.1 REFERENCES (Not Applicable)

#### 1.2 LUMP SUM PAYMENT ITEMS

Payment items for the work of this contract for which contract lump sum payments will be made are listed in the BIDDING SCHEDULE and described below. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

#### 1.3 UNIT PRICE PAYMENT ITEMS

Payment items for the work of this contract on which the contract unit price payments will be made are listed in the BIDDING SCHEDULE and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items. Submit originals of all field notes and all other records relating to Quantity Surveys.

# 1.4 BIDDING SCHEDULE - PAYMENT ITEMS

Payment items for the work of this contract on which the contract progress payments will be based are listed in the BIDDING SCHEDULE and are described below. All costs for items of work, which are not specifically mentioned to be included in a particular Bidding Schedule lump sum or unit price payment item, shall be included in the listed lump sum item most closely associated with the work involved.

- 1.4.1 Item No. 0001, "Mobilization and Demobilization"
  - a. Payment will be made for costs associated with mobilization and demobilization for dredging operations, as defined in Special Contract Requirements clause "PAYMENT FOR MOBILIZATION AND DEMOBILIZATION."
  - b. Unit of measure: lump sum.
- 1.4.2 Item No. 0002 "Maintenance Dredging with Ocean Disposal of Dredged Material"
  - a. The contract price per cubic yard for Item No. 0002 "Maintenance Dredging with Ocean Disposal of Dredged Material" shall include all cost of removal and disposal of all materials encountered from the areas indicated on contract drawings.

- b. The total amount of material removed and paid for under the contract for this Item, will be measured by the cubic yard in place by computing the volume between the bottom surface shown by soundings of the last pre-dredge survey made before dredging begins and the bottom surface shown by the soundings of a post-dredge survey made as soon as practicable after the removal of the material. Dredged material will be included that is within the limits of the side slopes and specified channel overdepth as described in Section 02325 DREDGING, paragraph OVERDEPTH AND SIDE SLOPES, less any deductions that may be required for misplaced material described in paragraph DISPOSAL OF EXCAVATED MATERIAL.
- c. The contract drawings listed in Special Contract Requirements, Paragraph "Contract Drawings, Maps and Specifications" are believed to accurately represent conditions existing on the date of the survey shown on the drawings, but the depths and the specific areas to be dredged shown thereon may be verified and corrected by soundings taken by the Government before dredging begins. Determination of quantities removed and the deductions made to determine quantities after having once been made by the Contracting Officer, will not be reopened, except on evidence of collusion, fraud, or obvious error.
- d. Monthly partial payments will be based on approximate quantities determined by Contractor quality control surveys. The pre-dredge survey made immediately before dredging, and the post-dredge survey made as soon as practicable after the removal of the material, will be performed by the Government at no cost to the Contractor.
- e. Unit of measure: Cubic Yard.
- PART 2 PRODUCTS (Not Applicable)
- PART 3 EXECUTION (Not Applicable)
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#### SECTION 01312

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#### SECTION 01312

#### QUALITY CONTROL SYSTEM (QCS)

#### PART 1 GENERAL

#### 1.1 GENERAL

The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor shall use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. The Contractor module, user manuals, updates, and training information can be downloaded from the RMS web site. This joint Government-Contractor use of RMS and QCS will facilitate electronic exchange of information and overall management of the contract. QCS provides the means for the Contractor to input, track, and electronically share information with the Government in the following areas:

Administration
Finances
Quality Control
Submittal Monitoring
Scheduling
Import/Export of Data

#### 1.1.1 Correspondence and Electronic Communications

For ease and speed of communications, both Government and Contractor will, to the maximum extent feasible, exchange correspondence and other documents in electronic format. Correspondence, pay requests and other documents comprising the official contract record shall also be provided in paper format, with signatures and dates where necessary. Paper documents will govern, in the event of discrepancy with the electronic version.

#### 1.1.2 Other Factors

Particular attention is directed to Contract Clause, "Schedules for Construction Contracts", Contract Clause, "Payments", Section 01330, SUBMITTAL PROCEDURES, and Section 01451, CONTRACTOR QUALITY CONTROL, which have a direct relationship to the reporting to be accomplished through QCS. Also, there is no separate payment for establishing and maintaining the QCS database; all costs associated therewith shall be included in the contract pricing for the work.

# 1.2 QCS SOFTWARE

QCS is a Windows-based program that can be run on a stand-alone personal computer or on a network. The Government will make available the QCS software to the Contractor after award of the construction contract. Prior to the Pre-Construction Conference, the Contractor shall be responsible to download, install and use the latest version of the QCS software from the Government's RMS Internet Website. Upon specific justification and request by the Contractor, the Government can provide QCS on 3-1/2 inch

high-density diskettes or CD-ROM. Any program updates of QCS will be made available to the Contractor via the Government RMS Website as they become available.

#### 1.3 SYSTEM REQUIREMENTS

The following is the minimum system configuration that the Contractor shall have to run QCS:

#### RMS Server

#### Hardware

IBM-compatible PC with 1000 MHz Pentium or higher processor

1000+ MB RAM

1 GB free disk space

3 1/2 inch high-density floppy drive

Compact Disk (CD) Reader 8x speed or higher

TCP/IP Network/Internet Connection

#### Software

Windows 2000 or higher

Oracle 8i Server

Virus protection software that is regularly upgraded with all issued manufacturer's updates

#### Personnel

Oracle Database Administrator (DBA)

## RMS Workstation

#### Hardware

IBM-compatible PC with 1000 MHz Pentium or higher processor

256+ MB RAM for workstation

500 MB free disk space

3 1/2 inch high-density floppy drive

Compact Disk (CD) Reader 8x speed or higher

SVGA or higher resolution monitor (1024x768, 256 colors)

Mouse or other pointing device

Windows compatible printer. (Laser printer must have 4 MB+ of RAM)

TCP/IP Network/Internet Connection

#### Software

MS Windows 2000 or higher

Oracle 8i Client

Word Processing software: MS Word 2000 or newer

Latest version of: Netscape Navigator, Microsoft Internet Explorer, or other browser that supports HTML 4.0 or higher

Electronic mail (E-mail) MAPI compatible

Virus protection software that is regularly upgraded with all issued manufacturer's updates

#### QCS and QAS System

#### Hardware

IBM-compatible PC with 1000 MHz Pentium or higher processor

256+ MB RAM for workstation / 512+ MB RAM for server

1 GB hard drive disk space for sole use by the QCS system

3 1/2 inch high-density floppy drive

Compact Disk (CD) Reader 8x speed or higher

SVGA or higher resolution monitor (1024x768, 256 colors)

Mouse or other pointing device

Windows compatible printer. (Laser printer must have 4 MB+ of RAM)

Connection to the Internet, minimum 56k BPS

# Software

MS Windows 2000 or higher

QAS-Word Processing software: MS Word 2000 or newer

Latest version of: Netscape Navigator, Microsoft Internet Explorer, or other browser that supports HTML 4.0 or higher

Electronic mail (E-mail) MAPI compatible

Virus protection software that is regularly upgraded with all issued manufacturer's updates

#### 1.4 RELATED INFORMATION

# 1.4.1 QCS User Guide

After contract award, the Contractor shall download instructions for the installation and use of QCS from the Government RMS Internet Website; the Contractor can obtain the current address from the Government. In case of justifiable difficulties, the Government will provide the Contractor with a CD-ROM containing these instructions.

#### 1.4.2 Contractor Quality Control(CQC) Training

The use of QCS will be discussed with the Contractor's QC System Manager during the mandatory CQC Training class.

#### 1.5 CONTRACT DATABASE

Prior to the pre-construction conference, the Government shall provide the Contractor with basic contract award data to use for QCS. The Government will provide data updates to the Contractor as needed, generally by files attached to E-mail. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and OA data.

#### 1.6 DATABASE MAINTENANCE

The Contractor shall establish, maintain, and update data for the contract in the QCS database throughout the duration of the contract. The Contractor shall establish and maintain the QCS database at the Contractor's site office. Data updates to the Government shall be submitted by E-mail with file attachments, e.g., daily reports, schedule updates, payment requests. If permitted by the Contracting Officer, a data diskette or CD-ROM may be used instead of E-mail (see Paragraph DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM). The QCS database typically shall include current data on the following items:

# 1.6.1 Administration

# 1.6.1.1 Contractor Information

The database shall contain the Contractor's name, address, telephone numbers, management staff, and other required items. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver Contractor administrative data in electronic format via E-mail.

# 1.6.1.2 Subcontractor Information

The database shall contain the name, trade, address, phone numbers, and other required information for all subcontractors. A subcontractor must be listed separately for each trade to be performed. Each subcontractor/trade shall be assigned a unique Responsibility Code, provided in QCS. Within 14 calendar days of receipt of QCS software from the Government, the Contractor shall deliver subcontractor administrative data in electronic format via E-mail.

# 1.6.1.3 Correspondence

All Contractor correspondence to the Government shall be identified with a serial number. Correspondence initiated by the Contractor's site office

shall be prefixed with "S". Letters initiated by the Contractor's home (main) office shall be prefixed with "H". Letters shall be numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C".

# 1.6.1.4 Equipment

The Contractor's QCS database shall contain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

#### 1.6.1.5 Management Reporting

QCS includes a number of reports that Contractor management can use to track the status of the project. The value of these reports is reflective of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

# 1.6.2 Finances

#### 1.6.2.1 Pay Activity Data

The QCS database shall include a list of pay activities that the Contractor shall develop in conjunction with the construction schedule. The sum of all pay activities shall be equal to the total contract amount, including modifications. Pay activities shall be grouped by Contract Line Item Number (CLIN), and the sum of the activities shall equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

# 1.6.2.2 Payment Requests

All progress payment requests shall be prepared using QCS. The Contractor shall complete the payment request worksheet and include it with the payment request. The work completed under the contract, measured as percent or as specific quantities, shall be updated at least monthly. After the update, the Contractor shall generate a payment request report using QCS. The Contractor shall submit the payment requests with supporting data by E-mail with file attachment(s). If permitted by the Contracting Officer, a data diskette may be used instead of E-mail. A signed paper copy of the approved payment request is also required, which shall govern in the event of discrepancy with the electronic version.

#### 1.6.3 Quality Control (QC)

QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other contractor QC requirements. The Contractor shall maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report. The Contractor shall provide the Government a Contractor Quality Control (CQC) Plan within the time required in Section 01451, CONTRACTOR QUALITY CONTROL. Within seven calendar days of Government acceptance, the Contractor shall submit a data diskette or CD-ROM reflecting the information contained in the accepted CQC Plan: schedule, pay activities, features of work, submittal register, QC requirements, and equipment list.

# 1.6.3.1 Daily Contractor Quality Control (CQC) Reports.

QCS includes the means to produce the Daily CQC Report. The Contractor may use other formats to record basic QC data. However, the Daily CQC Report generated by QCS shall be the Contractor's official report. Data from any supplemental reports by the Contractor shall be summarized and consolidated onto the QCS-generated Daily CQC Report. Daily CQC Reports shall be submitted as required by Section 01451, CONTRACTOR QUALITY CONTROL. Reports shall be submitted electronically to the Government using E-mail or diskette within 24 hours after the date covered by the report. Use of either mode of submittal shall be coordinated with the Government representative. The Contractor shall also provide the Government a signed, printed copy of the daily CQC report.

# 1.6.3.2 Deficiency Tracking.

The Contractor shall use QCS to track deficiencies. Deficiencies identified by the Contractor will be numerically tracked using QC punch list items. The Contractor shall maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The Government's QA punch list items will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of both QC and QA punch list items.

# 1.6.3.3 Three-Phase Control Meetings

The Contractor shall maintain scheduled and actual dates and times of preparatory and initial control meetings in QCS.

# 1.6.3.4 Accident/Safety Tracking.

The Government will issue safety comments, directions, or guidance whenever safety deficiencies are observed. The Government's safety comments will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of the safety comments. In addition, the Contractor shall utilize QCS to advise the Government of any accidents occurring on the jobsite. This brief supplemental entry is not to be considered as a substitute for completion of mandatory reports, e.g., ENG Form 3394 and OSHA Form 300.

# 1.6.3.5 Features of Work

The Contractor shall include a complete list of the features of work in the QCS database. A feature of work may be associated with multiple pay activities. However, each pay activity (see subparagraph "Pay Activity Data" of paragraph "Finances") will only be linked to a single feature of work.

# 1.6.3.6 QC Requirements

The Contractor shall develop and maintain a complete list of QC testing, transferred and installed property, and user training requirements in QCS. The Contractor shall update all data on these QC requirements as work progresses, and shall promptly provide this information to the Government via OCS.

#### 1.6.4 Submittal Management

The Government will provide the initial submittal register in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update shall be produced using QCS. RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

#### 1.6.5 Schedule

The Contractor shall develop a construction schedule consisting of pay activities, in accordance with Contract Clause "Schedules for Construction Contracts". This schedule shall be input and maintained in the QCS database either manually or by using the Standard Data Exchange Format (SDEF). The updated schedule data shall be included with each pay request submitted by the Contractor.

#### 1.6.6 Import/Export of Data

QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data, and schedule data using SDEF.

#### 1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. The Contractor shall ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

#### 1.8 DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM

The Government-preferred method for Contractor's submission of updates, payment requests, correspondence and other data is by E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of computer diskettes or CD-ROM for data transfer. Data on the disks or CDs shall be exported using the QCS built-in export function. If used, diskettes and CD-ROMs will be submitted in accordance with the following:

# 1.8.1 File Medium

The Contractor shall submit required data on 3-1/2 inch double-sided high-density diskettes formatted to hold 1.44 MB of data, capable of running under Microsoft Windows 95 or newer. Alternatively, CD-ROMs may be used. They shall conform to industry standards used in the United States. All data shall be provided in English.

#### 1.8.2 Disk or CD-ROM Labels

The Contractor shall affix a permanent exterior label to each diskette and CD-ROM submitted. The label shall indicate in English, the QCS file name, full contract number, contract name, project location, data date, name and telephone number of person responsible for the data.

#### 1.8.3 File Names

The Government will provide the file names to be used by the Contractor with the QCS software.

#### 1.9 MONTHLY COORDINATION MEETING

The Contractor shall update the QCS database each workday. At least monthly, the Contractor shall generate and submit an export file to the Government with schedule update and progress payment request. As required in Contract Clause "Payments", at least one week prior to submittal, the Contractor shall meet with the Government representative to review the planned progress payment data submission for errors and omissions. The Contractor shall make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by incomplete or incorrect data submittals will be returned. The Government will not process progress payments until an acceptable QCS export file is received.

#### 1.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

-- End of Section --

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#### SECTION 01330

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#### SECTION 01330

#### SUBMITTAL PROCEDURES

#### PART 1 GENERAL

#### 1.1 DEFINITIONS

#### 1.1.1 Submittal

Contract Clauses "FAR 52.236-5, Material and Workmanship," paragraph (b) and "FAR 52.236-21, Specifications and Drawings for Construction," paragraphs (d), (e), and (f) apply to all "submittals."

# 1.1.2 Submittal Descriptions (SD)

Submittals requirements are specified in the technical sections. Submittals are identified by SD numbers and titles as follows.

#### SD-01 Preconstruction Submittals

Certificates of insurance.
Surety bonds.
List of proposed subcontractors.
List of proposed products.
Construction Progress Schedule.
Submittal register.
Schedule of prices.
Health and safety plan.
Work plan.
Quality control plan.
Environmental protection plan.

# SD-02 Shop Drawings

Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.

Diagrams and instructions from a manufacturer or fabricator for use in producing the product and as aids to the Contractor for integrating the product or system into the project.

Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated.

#### SD-05 Design Data

Calculations, mix designs, analyses or other data pertaining to a part of work.

# SD-06 Test Reports

Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified

requirements. (Testing must have been within three years of date of contract award for the project.)

Report which includes findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.

Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.

Investigation reports.

Daily checklists.

Final acceptance test and operational test procedure.

# 1.1.3 Approving Authority

Office authorized to approve submittal.

#### 1.1.4 Work

As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

#### 1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Submittal register; G, RO

#### 1.3 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

#### 1.3.1 Government Approved

Government approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

#### 1.3.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

#### 1.4 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the Contractor Quality Control (CQC) requirements of this contract is responsible for the satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

#### 1.5 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

#### 1.6 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

#### 1.7 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager and each item shall be stamped, signed, and dated by the CQC System Manager indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

# 1.8 SUBMITTAL REGISTER

At the end of this section is a submittal register showing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. The Contractor shall maintain a submittal register for the project in accordance with Section 01312 QUALITY CONTROL

SYSTEM (QCS).

#### 1.9 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 21 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals.

#### 1.10 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms are included in the QCS software that the Contractor is required to use for this contract. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

#### 1.11 SUBMITTAL PROCEDURE

Submittals shall be made as follows:

#### 1.11.1 Procedures for Review Copies

Submit seven (7) copies of each submittal item with an attached ENG FORM 4025 Transmittal Form. The Contractor will be informed at the pre-construction conference to send all submittals to either the project Resident Office or to the project Area Engineer Office, as applicable.

- a. Construction/Operations Division ("RO" Reviewer): An "RO" in column "f" indicates that the submittal review action is by New England District Construction/Operations Division.
- b. Engineering/Planning Division ("DO" Reviewer): An "DO" on the attached submittal register, column "f" indicates that the submittal review action is by the New England District, Engineering/Planning Division.
- c. A "G" followed by "A" on the attached submittal register, column "f" indicates that the submittal review action is by the New England District, Construction/Operations Division and that the submittal requires Government acceptance.

#### 1.11.2 Information on Submittal Status

All Contractor requests for current status of submittal reviews shall be made through the Resident Engineer.

# 1.11.3 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and

annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

#### 1.12 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

#### 1.13 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Five copies of the submittal will be retained by the Contracting Officer and two copies of the submittal will be returned to the Contractor.

#### 1.14 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

#### 1.15 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

CONTRACTOR
(Firm Name)
Approved
$\underline{\hspace{1cm}}$ Approved with corrections as noted on submittal data and/or attached sheets(s).
SIGNATURE:
TITLE:
DATE:

-- End of Section --

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# INSTRUCTIONS

- 1. Section I will be initiated by the Contractor in the required number of copies.
- 2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.
- 3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.
- 4. Submittals requiring expeditious handling will be submitted on a separate form.
- 5. Separate transmittal form will be used for submittals under separate sections of the specifications.
- 6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".
- Form is self-transmittal, letter of transmittal is not required.
- When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
- 9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section 1, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

# THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A -- Approved as submitted. E -- Disapproved (See attached).

Receipt acknowledged.

ш

Approved, except as noted on drawings

1

e c

Receipt acknowledged, does not comply as noted with contract requirements. FX : Refer to attached sheet resubmission required. Approved, except as noted on drawings. 1

D -- Will be returned by separate correspondence. G -- Other (Specify)

Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications. 10.

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#### SECTION 01355

#### ENVIRONMENTAL PROTECTION

#### PART 1 GENERAL

#### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

#### U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 328	Definitions
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 279	Standards for the Management of Used Oil
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification

# U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2003) U.	S. Army	Corps	on	Engineers	Safety
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#### 1.2 DEFINITIONS

# 1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

# 1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

#### 1.2.3 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste

streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e. methyl ethyl ketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.

#### 1.2.4 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

#### 1.3 GENERAL REQUIREMENTS

The Contractor shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all applicable environmental Federal, State, and local laws and regulations. The Contractor shall be responsible for any delays resulting from failure to comply with environmental laws and regulations.

#### 1.4 SUBCONTRACTORS

The Contractor shall ensure compliance with this section by subcontractors.

#### 1.5 PAYMENT

No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. All costs associated with this section shall be included in the contract price. The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations.

#### 1.6 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

#### SD-01 Preconstruction Submittals

Environmental Protection Plan; G, RO

The environmental protection plan.

Marine Mammal Observer; G, RO

Submit for review and approval the name and qualifications of the Marine Mammal Observer. Present evidence that the Marine Mammal Observer meets the qualifications as specified in the "Conditions Recommended by the National Marine Fisheries Service for Projects Funded or Undertaken by the Corps of Engineers that Include Disposal of Dredged Material at the Massachusetts Bay Disposal

Site" attached at the end of this section.

#### 1.7 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Contracting Officer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Contracting Officer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

#### 1.7.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

#### 1.7.2 Contents

The environmental protection plan shall include, but shall not be limited to, the following:

- a. Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the Environmental Protection Plan.
- b. Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.
- c. Name(s) and qualifications of person(s) responsible for training the Contractor's environmental protection personnel.
- d. Description of the Contractor's environmental protection personnel training program.
- e. The Spill Control plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. The Spill Control Plan supplements the requirements of EM 385-1-1. This plan shall include as a minimum:
  - 1. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete

documentation. This individual shall immediately notify the Contracting Officer and the local Fire Department in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers.

- 2. The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.
- 3. Training requirements for Contractor's personnel and methods of accomplishing the training.
- 4. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.
- 5. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.
- 6. The methods and procedures to be used for expeditious contaminant cleanup.
- f. A non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including debris collected during dredging operations. The Contractor shall identify any subcontractors responsible for the transportation and disposal of solid waste. Licenses or permits shall be submitted for solid waste disposal sites that are not a commercial operating facility. Evidence of the disposal facility's acceptance of the solid waste shall be attached to this plan during the construction.
- g. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become air borne and travel off the project site.
- h. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. In accordance with EM 385-1-1, a copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time shall be included in the contaminant prevention plan. As new hazardous materials are brought on site or removed from the site, the plan shall be updated.
- i. The Contractor shall prepare and submit a "Marine Mammal Protection Plan" as part of the Environmental Protection Plan. The plan shall include the names and qualifications of the designated observers, as well as specific details regarding protection of marine mammals during the work. The Contractor shall also comply with all aspects of the "Legal Requirements for operation of any vessel around North Atlantic Right Whales:" and other requirements relative to the protection of marine mammals, attached at the end of this section.

# 1.7.3 Appendix

Copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents shall be attached, as an appendix, to the Environmental Protection Plan.

#### 1.8 PROTECTION FEATURES

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities, the Contractor and the Contracting Officer shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report shall be signed by both the the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. The Contractor shall protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the Contractor's work under the contract.

## 1.9 SPECIAL ENVIRONMENTAL REQUIREMENTS

The Contractor shall comply with the special environmental requirements included below. These special environmental requirements are an outgrowth of environmental commitments made by the Government during the project development.

# 1.9.1 Marine Mammal Observer

The Contractor shall provide the services of a Marine Mammal Observer with qualifications and duties as specified in the "Conditions Recommended by the National Marine Fisheries Service for Projects Funded or Undertaken by the Corps of Engineers that Include Disposal of Dredged Material at the Massachusetts Bay Disposal Site" attached at the end of this section. Provide whale observers on board the scows transiting to the MBDS from February 1 to May 31 to avoid potential ship strikes. The Marine Mammal Observer will be responsible for prohibiting harassment of marine mammals and sea turtles during disposal operations. Funding of the Marine Mammal Observer shall be the Contractor's responsibility. The Marine Mammal Observer shall be approved by the Contracting Officer.

# 1.10 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the drawings, plans and specifications which may have an environmental impact will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

#### 1.11 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

#### PART 2 PRODUCTS (NOT USED)

#### PART 3 EXECUTION

#### 3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

This Article supplements the Contractor's responsibility under the contract clause PERMITS AND RESPONSIBILITIES to the extent that the Government has obtained a Coastal Zone Consistency Determination for this project. The Coastal Zone Consistency Determination is attached at the end of this section.

#### 3.2 WATER RESOURCES

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters.

#### 3.3 AIR RESOURCES

Equipment operation, activities, or processes performed by the Contractor shall be in accordance with all Federal and State air emission and performance laws and standards.

# 3.3.1 Particulates

Dust particles; aerosols and gaseous by-products from construction activities shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall comply with all State and local visibility regulations.

# 3.3.2 Odors

Odors from construction activities shall be controlled at all times. The odors shall not cause a health hazard and shall be in compliance with State regulations and/or local ordinances.

#### 3.3.3 Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise. The Contractor shall comply with the provisions of the State of Massachusetts rules.

## 3.4 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

#### 3.4.1 Solid Wastes

Solid wastes shall be placed in containers which are emptied on a regular schedule. Handling, storage, and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste. The Contractor shall transport solid waste off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. The Contractor shall verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate. The Contractor shall comply with Federal, State, and local laws and regulations pertaining to the use of landfill areas.

## 3.4.2 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. Storage of fuel on the project site shall be accordance with all Federal, State, and local laws and regulations.

# 3.5 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

If during excavation or other construction activities any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered or found, all activities that may damage or alter such resources shall be temporarily suspended. Resources covered by this paragraph include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rock alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, the Contractor shall immediately notify the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

## 3.6 BIOLOGICAL RESOURCES

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor shall be responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

# 3.7 PREVIOUSLY USED EQUIPMENT

The Contractor shall clean all previously used construction equipment prior

to bringing it onto the project site. The Contractor shall ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. The Contractor shall consult with the USDA jurisdictional office for additional cleaning requirements.

# 3.8 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

# 3.9 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings shall be conducted for new personnel and when site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat that are known to be in the area.

# 3.10 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area seeded unless otherwise indicated.

## **ATTACHMENTS**

Conditions Recommended by the National Marine Fisheries Service for Projects Funded or Undertaken by the Corps of Engineers that Include Disposal of Dredged Material at the Massachusetts Bay Disposal Site

March 27, 1997

- (1) From February 1 through May 30 of any year, disposal vessels including tugs, barges, and scows transiting between the dredge site and the Massachusetts Bay Disposal Site shall operate at speeds not to exceed 5 knots after sunset, before sunrise, or in daylight conditions where visibility is less than one nautical mile. Disposal shall not proceed if these requirements cannot be met due to weather or sea conditions. In that regard, the vessel captain and/or contractor should be aware of predicted conditions before departing for the disposal site. The intent of this condition is to reduce the potential for vessel collisions with threatened and endangered species, including right whales.
- (2) From February 1 through May 30 of any year, an approved marine mammal observer (i.e., meeting the attached National Marine Fisheries Service (NMFS) criteria on observer qualifications, including the specified skill sets for sea turtles and whales) must be present aboard disposal vessel transiting between the dredge site and the Massachusetts Bay Disposal Site during daylight hours. When threatened or endangered species are observed to be present, the vessel captain shall, except when precluded by safety considerations, follow the advice of the marine mammal observer to avoid harassment of or direct impact to individual animals. The observer shall fully complete a separate Corps of Engineers marine mammal observation report for every sighting and shall ensure that this report is received by the Corps New England District, Environmental Resources Section (fax number (978) 318-8560) and The Regulatory Compliance Branch (fax number (978) 318-8303) within one week of the trip date. The observer shall maintain contact with the NMFS (Habitat and Protected Resource Division, phone number (508)281-9328) and other recognized experts to provide and receive information regarding the presence and distribution of threatened and endangered species in Massachusetts Bay. All right whale sightings (including location) shall be reported to Ms. Pat Genior at NMFS Woods Hole (telephone number (508) 495-2264) at the end of the day. The intent of this condition is to reduce the potential for vessel collisions with threatened and endangered species, including right whales, and to minimize potential impacts of dredged material disposal on threatened and endangered species.

Marine mammal observers shall use the following guidelines to minimize conflicts with threatened or endangered species:

- (a) A marine mammal observer shall be posted on lookout at all times during daylight hours when disposal vessels have left the harbor and are underway or at the disposal site.
- (b) Disposal vessels shall not approach threatened or endangered species closer that 100 feet (see additional condition below for approaching right whales).
- (c) Disposal vessels shall adhere to the attached NMFS regulations for

approaching right whales, 50 CFR Part 222.32, which restrict approaches within 500 yards of a right whale and specify avoidance measures for vessels that encounter right whales.

- (d) If threatened or endangered species are sighted within 500 feet from the disposal point, dredged material shall not be released. In this case, the vessel captain may elect to wait until the animals move away from the disposal point prior to disposal, or, subject to the judgement of the observer, may dispose at an authorized alternative disposal location under the same restrictions noted herein for disposal at the primary disposal location.
- (e) If threatened or endangered species are sighted between 500 feet and 1500 feet from the disposal point, the observer shall note the animal's behavior, relative position, and direction and speed of movement to determine if release of dredged material is likely to harass or endanger the animals. For example, whales actively feeding at or near the disposal point are more likely than resting whales to interact with released sediments. If the observer judges that disposal is likely to harass or endanger the animals, the observer shall inform the vessel captain and disposal shall be delayed until the animals change their behavior or move away such that the observer judges that no danger to the animals will result from disposal.

## OBSERVER CREDENTIALS

Certain credentials and experience might indicate an observer has the skills listed below. Ideally, the applicant will have an educational background in marine biology, general experience aboard dredges, and hands on field experience with the species of concern.

A person who does not have a college degree in marine biology or a related field may be qualified as an observer if she/he has successfully completed an approved endangered species dredge observer training program (item 3a), and has twice the experience identified as necessary in items 2b, 3c, and 3d.

- 1. EDUCATION: College degree (BS or higher) in marine biology or a related field, and
- 2. DREDGE/FLOAT EXPERIENCE:
- a) For shortnose sturgeon or sea turtle observers: Work for a minimum or one week in any capacity aboard dredges of the same type as those to be used in the proposed project, or
- b) For large whale observers: Work for a minimum of two months as a naturalist or wildlife guide aboard an active whale watch vessel or other vessel primarily engaged in the observation of large whales in the wild, and
- 3. FIELD EXPERIENCE AND EQUIVALENTS
- a) Successful completion of an approved endangered species dredge observer training course, or
- b) Documented field research focused on the species or its habitat, or
- c) Work for a minimum of four months as an endangered species observer-in-training aboard dredges that have interacted with the species

in question, or

d) Active involvement for a minimum of one year in organized responses to protected species stranding events where sea turtles and marine mammals are identified.

Note: If dredge operations are likely to interact with more than one group of protected species, the observer must demonstrate that he/she has all of the respective skill sets.

- 4 SKILL SETS
- a) Observers must be able to identify sea turtle species.
- b) Observers must be able to advise dredge operators on the appropriate maneuvering to avoid harassing or impacting sea turtles.
- c) Observers must be able to identify endangered whale species that may be encountered during project operations.
- d) Observers must be able to discern whale behaviors, such as milling, traveling, and feeding.
- e) Observers must be able to demonstrate knowledge of individually distinctive markings on humpback and right whales for identification purposes.

# I. Legal Requirements for operation of any vessel around North Atlantic Right Whales:

- 50 CFR Parts 217 and 222
- 222.32 Approaching North Atlantic Right Whales
- (a) Prohibitions. Except as provided under paragraph (c) of this section, it is unlawful for any person subject to the jurisdiction o the United States to commit, attempt to commit, to solicit another to commit, or cause to be committed any of the following acts:
- (1) Approach (including by interception) within 500 yards (460m) of a right whale by vessel, aircraft, or any other means;
- (2) Fail to undertake required right whale avoidance measures specified under paragraph (b) of this section.
- (b) Right Whale Avoidance Measures. Except as provided under paragraph (c) of this section, the following avoidance measures must be taken if within 500 yards (460m) of a right whale:
- (1) If underway, a vessel must steer a course away from the right whale, and immediately leave the area at a slow safe speed;
- (2) An aircraft must take a course away from the right whale and immediately leave the area at a constant air speed.
- (c) Exceptions. The following exceptions apply to this section, but any person who claims the applicability of an exception has the burden of proving that the exception is applicable:
- (1) Paragraph (a) and (b) of this section do not apply if a right whale approach is authorized by NMFS through a permit issued under subpart C (Endangered Fish or Wildlife Permits) of this part or through a similar authorization.
- (2) Paragraph (a) and (b) of this section do not apply where compliance would create an imminent and serious threat to a person, vessel, or aircraft
- (3) Paragraph (a) and (b) of this section do not apply when approaching to investigate a right whale entanglement or injury, or to assist in the disentanglement or rescue of a right whale.
- (4) Paragraphs (a) and (b) of this section do not apply to an aircraft unless the aircraft is conducting whale watch activities or is being operated for that purpose.
- (5) Paragraph (b) of this section does not apply to the extent that a vessel is restricted in her ability to maneuver, and because of the restriction, cannot comply with paragraph (b) of this section.

# II. Requirements on operation around any large whale or sea turtle for purposes of ocean disposal at the Massachusetts Bay Disposal Site:

- (a) Operational restrictions.
- (1) Disposal operators must not approach within 500 yards (460m) of any

large whale or 100 yards of any sea turtle with a vessel;

- (2) Disposal operators must follow the avoidance measures described below:
- (b) Avoidance Measures. Except as provided under paragraph (c) of this section, the following avoidance measure must be taken if within 500 yards (460m) of any large whale or 100 yards of any sea turtle:
- (1) If underway, a vessel must steer a course away from the whale or sea turtle, and immediately leave the area at a slow safe speed;
- (c) Exceptions. The following exceptions apply to this section, but any person who claims the applicability of an exception has the burden of proving that the exception is applicable:
- (1) These requirements do no apply where compliance would create an imminent and serious threat to a person or vessel.
- (2) These requirements do not apply when approaching to investigate a right whale entanglement or injury, or to assist in the disentanglement or rescue of a right whale, provided that permission is received from NMFS or a NMFS designee prior to the approach.
- (3) Paragraph (b) of this section does not apply to the extent that a vessel is restricted in her ability to maneuver (as defined in 72 COLREGS, 33 CFR), and because of the restriction, cannot comply with paragraph (b) of this section.

# III. Requirements for release of dredged material at the Massachusetts Bay Disposal Site:

If threatened or endangered species of any kind (including whales and sea turtles) are sighted with 500 yards from the disposal point, operators must wait for the animals to leave the area or must use an alternative disposal point specified by the Corps of Engineers (NAE) within the boundary of the designated disposal site. If threatened or endangered species of any kind are sighted between 500 and 1500 yards from the disposal point, the observer shall note animals behavior, relative position, and direction and speed of movement to determine if release of dredged material is likely to harass or endanger the animals. For example, whale actively feeding at or near the disposal point are more likely than resting whales to interact with released sediments. If the observer judges that disposal is likely to harass or endanger the animals, the observer shall inform the vessel captain. Disposal shall be delayed until the animals change their behavior or move away such that the observer judges that no danger to the animals will result from disposal. In the event that behavior and direction of movement is unpredictable, operators should use the alternative approved disposal point. In the presence of right whales, the most protective operational measure is advised.

# IV. Other Responsibilities of Vessel Operator/Onboard Observer (as appropriate):

- (a) The observer is responsible for contacting NMFS early warning network for the most recent information on whale movements and locations prior to departure for the disposal site to check for the presence of whales.
- (b) The observer shall report all whale sightings, noting location, to the early warning network at the end of the day. The point of contact is Pat

Gerrior, NMFS-Woods Hole, (508)495-2264. The World Wide Web site is http://whale.wheelock.edu/whalenet-stuff/rw\_intro.html.

-- End of Section --



# THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
251 Causeway Street, Suite 800, Boston, MA 02114-2136
(617) 626-1200 FAX: (617) 626-1240

October 18, 2005

Bill Kavanaugh
Project Manager
US Army Corps of Engineers
New England District
696 Virginia Road
Concord, MA 01742-2751

RE: Federal Consistency Certification: Maintenance Dredging of the Federal Navigation Project in the Weymouth Fore River, Weymouth

Dear Mr. Kavanaugh:

The Massachusetts Office of Coastal Zone Management (CZM) has completed its review of the above-referenced project as described in the Environmental Assessment dated October 18, 2005.

We concur with your certification and find that the activity as proposed is consistent with the CZM enforceable program policies.

If the above-referenced proposal, which has received this concurrence from CZM, is modified in any manner or is noted to be having effects on the coastal zone or its uses that are substantially different than originally proposed, please submit an explanation of the nature of the change to this Office pursuant to 301 CMR 21.17 and 15 CFR 930.66.

Thank you for your cooperation with CZM.

Sincerely,

Susan Snow-Cotter

Director

SSC/iw

Cc: Crystal Gardner, Chief

Regulatory Branch, US Army Corps of Engineers

Ben Lynch, Acting Section Chief

Waterways Program, MA DEP

John Weber,

CZM Boston Harbor Regional Coordinator

MITT ROMNEY GOVERNOR FERRY HEALEY LIEUTENANT GOVERNOR STEPHEN R. PRITCHARD SECRETARY SUSAN SNOW-COTTER DIRECTOR

WWW.mass.gov/czm



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## SECTION 01451

# CONTRACTOR QUALITY CONTROL

## PART 1 GENERAL

## 1.1 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

## 3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site.

## 3.2 QUALITY CONTROL PLAN

The Contractor shall furnish for review by the Government, not later than 15 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Government will consider an interim plan for the first 30 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

# 3.2.1 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by

subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the project superintendent.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.
- d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors. These procedures shall be in accordance with Section 01330 SUBMITTAL PROCEDURES.
- e. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.
- f. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.
- g. Reporting procedures, including proposed reporting formats.
- h. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

# 3.2.2 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

# 3.2.3 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the

Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

# 3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of 5 calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

# 3.4 QUALITY CONTROL ORGANIZATION

# 3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure safety and contract compliance. The Safety and Health Officer shall receive direction and authority from the CQC System Manager and shall serve as a member of the CQC staff. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

# 3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a construction person with a minimum of three years in related work. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be assigned as System Manager but may have duties as project superintendent in addition to quality control. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

# 3.4.3 Additional Requirement

In addition to the above experience requirements the CQC System Manager shall have completed the course entitled "Construction Quality Management For Contractors". This course is periodically offered at the New England District Office at Concord, Massachusetts.

# 3.4.4 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

# 3.5 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

#### 3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of the construction work as follows:

# 3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved

shop drawings or submitted data, and are properly stored.

- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- j. Discussion of the initial control phase.
- k. The Government shall be notified at least 48 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

# 3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least 48 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

# 3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract

requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

# 3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, onsite production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

#### 3.7 COMPLETION INSPECTION

## 3.7.1 Final Acceptance Inspection

See Section 01723 FIELD ENGINEERING FOR DREDGING.

#### 3.8 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.
- e. Submittals and deliverables reviewed, with contract reference, by whom, and action taken.
- f. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- g. Instructions given/received and conflicts in plans and/or specifications.
- h. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and

materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 48 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

## 3.9 SAMPLE FORMS

The Contractor shall prepare and submit two (2) copies of the Daily Report of Operations, using ENG Form No. 27A and/or ENG Form No. 4267, for each dredge. Sample forms are attched at the end of Section 02325 DREDGIING.

# 3.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

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## SECTION 01500

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## SECTION 01500

## TEMPORARY FACILITIES AND CONTROLS

## PART 1 GENERAL

#### 1.1 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Site Plan; G, RO.

Sketch of the proposed location and dimensions of any area to be used by the Contractor for storage and staging, the number of trailers to be used, avenues of ingress/egress to the areas and details of improvements.

SD-02 Shop Drawings

Temporary Electrical System; G, RO.

Sketch of the proposed temporary electrical system.

## 1.2 SITE PLAN

The Contractor shall prepare a site plan indicating the proposed location and dimensions of any staging area to be used by the Contractor, the number of trailers to be used, avenues of ingress/egress to the area, and details of the fence installation if used. Any areas which may have to be graveled to prevent the tracking of mud shall also be identified. The Contractor shall also indicate if the use of a supplemental or other staging area is desired.

## 1.3 AVAILABILITY OF UTILITIES

Provide service required for construction operations. All water and electricity that may be required in the prosecution of the work shall be furnished by the Contractor at his own expense. There will be no Government furnished water and electricity at the project site.

## 1.4 SANITATION

Adequate sanitary conveniences of a type approved for the use of persons employed on the work shall be provided, properly secluded from public observation, and maintained by the Contractor in such a manner as required or approved by the Contracting Officer. These conveniences shall be maintained at all times without nuisance. Upon completion of the work, the conveniences shall be removed by the Contractor from the premises, leaving the premises clean and free from nuisance.

## 1.5 TELEPHONE SERVICE

Provide telephone service to field offices. Provide and maintain a telephone or equal means of communication which will be in an easily accessible location at each of the large construction areas on the project. Such means of communication shall be accessible during all work hours.

## 1.6 PLANT COMMUNICATION

Whenever the Contractor has the individual elements of its plant so located that operation by normal voice between these elements is not satisfactory, the Contractor shall install a satisfactory means of communication, such as telephone or other suitable devices. The devices shall be made available for use by Government personnel.

## 1.7 BULLETIN BOARD

## 1.7.1 Bulletin Board

Immediately upon beginning of work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the contract, Wage Rate Information poster, and other information approved by the Contracting Officer. The bulletin board shall be located at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer. Legible copies of the aforementioned data shall be displayed until work is completed. Upon completion of work the bulletin board shall be removed by and remain the property of the Contractor.

## 1.8 CONTRACTOR'S TEMPORARY FACILITIES

# 1.8.1 Administrative Field Offices

The Contractor shall provide and maintain administrative field office facilities within the construction area at the designated site.

# 1.8.2 Storage Areas

Area is available for use by the Contractor, for work, storage of equipment, materials and trailers during the life of this contract. A site will be determined at a prework conference prior to commencing work. The Contractor shall confine his storage areas to the limits as designated or approved by the Contracting Officer and shall be responsible for the security of the areas. Upon completion of the contract, the Contractor shall remove all equipment and materials, except as otherwise specified, and restore the site to its original condition as approved by the Contracting Officer at no additional cost to the Government.

# 1.8.3 Supplemental Storage Area

Upon Contractor's request, the Contracting Officer will designate another or supplemental area for the Contractor's use and storage of trailers, equipment, and materials. This area may not be in close proximity of the construction site. The Contractor shall be responsible for cleanliness and orderliness of the area used and for the security of any material or equipment stored in this area. Utilities will not be provided to this area by the Government.

## 1.8.4 Appearance of Trailers

Trailers utilized by the Contractor for administrative or material storage purposes shall present a clean and neat exterior appearance and shall be in a state of good repair. Trailers which, in the opinion of the Contracting Officer, require exterior painting or maintenance will not be allowed on the site.

# 1.8.5 Maintenance of Storage Area

Should the Contractor elect to traverse, with construction equipment or other vehicles, grassed or unpaved areas which are not established roadways, such areas shall be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways; gravel gradation shall be at the Contractor's discretion.

# 1.8.6 Security Provisions

Adequate outside security lighting shall be provided at the Contractor's temporary facilities. The Contractor shall be responsible for the security of its own equipment.

## 1.9 GOVERNMENT FIELD OFFICE

# 1.9.1 Resident Engineer's Office

The Contractor shall provide the Government Resident Engineer with an office, approximately 200 square feet in floor area, located where directed and providing space heat, electric light and power, and toilet facilities consisting of one lavatory and one water closet complete with connections to water and sewer mains. A portable toilet may be substituted for the water closet. Provide three telephone lines for telephone, fax, and computer. A mail slot in the door or a lockable mail box mounted on the surface of the door shall be provided. At completion of the project, the office shall remain the property of the Contractor and shall be removed from the site. Utilities shall be connected and disconnected in accordance with local codes and to the satisfaction of the Contracting Officer.

# 1.9.2 Trailer-Type Mobile Office

The Contractor may, at its option, furnish and maintain a trailer-type mobile office acceptable to the Contracting Officer and providing as a minimum the facilities specified above. The trailer shall be securely anchored to the ground at all four corners to guard against movement during high winds.

# 1.10 CLEANING DURING CONSTRUCTION

# 1.10.1 Daily Cleaning

Execute daily cleaning to keep the work, the site, and adjacent properties free from accumulation of waste materials, rubbish, and windblown debris, resulting from construction operations.

# 1.10.2 On-Site Container

Provide on-site containers for the collection of waste materials, debris, and rubbish.

## 1.10.3 Removal of Waste

Remove waste materials, debris, and rubbish from the site periodically and dispose of off Government property in accordance with applicable laws and regulations.

# 1.10.4 Burning

No burning of brush or debris will be permitted at the site.

#### 1.11 CLEANUP

Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways shall be cleaned away. Stored material not in trailers, whether new or salvaged, shall be neatly stacked when stored.

# 1.12 RESTORATION OF STORAGE AREA

Areas used by the Contractor for the storage of equipment or material, or other use, shall be restored to the original or better condition. Gravel used to traverse grassed areas shall be removed and the area restored to its original condition, including top soil and seeding as necessary.

## 1.13 REMOVAL OF TEMPORARY MATERIALS AND EQUIPMENT

Remove temporary materials, equipment, services, and construction prior to completion of work. Clean and repair damage caused by installation or use of temporary facilities. Return site to pre-construction condition.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

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## SECTION 01525

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## SECTION 01525

## SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS

# PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

# AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/ASSE A10.34 (2001) Protection of the Public on or Adjacent to Construction Sites

## ASME INTERNATIONAL (ASME)

ASME	B30.22	(2000)	Articulating	Boom	Cranes

ASME B30.5 (2000) Mobile and Locomotive Cranes

ASME B30.8 (2000) Floating Cranes and Floating

Derricks

# NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 10 (2002) Portable Fire Extinguishers

# U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2003) Safety -- Safety and Health Requirements

# 1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

Government acceptance is required for submittals with a "G, A" designation.

## SD-01 Preconstruction Submittals

Accident Prevention Plan (APP); G, A

Activity Hazard Analysis (AHA); G, A

Proof of qualification for Crane Operators; G, A

# SD-06 Test Reports

Reports

Submit reports as their incidence occurs, in accordance with the requirements of the paragraph entitled, "Reports."

Accident Reports

Monthly Exposure Reports

Crane Reports

Regulatory Citations and Violations

## 1.3 DEFINITIONS

- a. High Visibility Accident. Any mishap which may generate publicity and/or high visibility.
- b. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even though provided by a physician or registered personnel.
- c. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:
  - (1) Death, regardless of the time between the injury and death, or the length of the illness;
  - (2) Days away from work (any time lost after day of injury/illness onset);
  - (3) Restricted work;
  - (4) Transfer to another job;
  - (5) Medical treatment beyond first aid;
  - (6) Loss of consciousness; or
  - (7) A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (6) above.
- d. "USACE" property and equipment specified in USACE EM 385-1-1 should be interpreted as Government property and equipment.
- e. Weight Handling Equipment (WHE) Accident. A WHE accident occurs when any one or more of the six elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; material or equipment damage; dropped load; derailment; two-blocking; overload; and/or collision, including unplanned contact between the load, crane, and/or other objects. A dropped load, derailment, two-blocking, overload and collision are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.).

# 1.4 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, work performed shall comply with USACE EM 385-1-1, and federal, state, and local, laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall apply.

# 1.5 SITE QUALIFICATIONS, DUTIES AND MEETINGS

# 1.5.1 Personnel Qualifications

# 1.5.1.1 Site Safety and Health Officer (SSHO)

Site Safety and Health Officer (SSHO) shall be provided at the work site at all times to perform safety and occupational health management, surveillance, inspections, and safety enforcement for the Contractor. The Contractor Quality Control (QC) person can be the SSHO on this project. The SSHO shall meet the following requirements:

#### Level 1:

Worked on similar projects.

10-hour OSHA construction safety class or equivalent within last 3 years.

Competent person training as needed.

## Level 2:

A minimum of 3 years safety work on similar projects. 30-hour OSHA construction safety class or equivalent within last 3 years.

Competent person training as needed.

# 1.5.1.2 Crane Operators

Crane operators shall meet the requirements in USACE EM 385-1-1, Section 16 and Appendix G. In addition, for mobile cranes with Original Equipment Manufacturer (OEM) rated capacitates of 50,000 pounds or greater, crane operators shall be designated as qualified by a source that qualifies crane operators (i.e., union, a government agency, or and organization that tests and qualifies crane operators). Proof of current qualification shall be provided.

# 1.5.2 Personnel Duties

# 1.5.2.1 Site Safety and Health Officer (SSHO)/Superintendent

- a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Safety inspection logs shall be attached to the Contractors' daily quality control report.
- b. Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 and Daily Production reports for prime and sub-contractors.

- c. Maintain applicable safety reference material on the job site.
- d. Attend the pre-construction conference, pre-work meetings including preparatory inspection meeting, and periodic in-progress meetings.
- e. Implement and enforce accepted APPS and AHAs.
- f. Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. A list of unresolved safety and health deficiencies shall be posted on the safety bulletin board.
- g. Ensure sub-contractor compliance with safety and health requirements.

Failure to perform the above duties will result in dismissal of the superintendent and/or SSHO, and a project work stoppage. The project work stoppage will remain in effect pending approval of a suitable replacement.

# 1.5.3 Meetings

#### 1.5.3.1 Preconstruction Conference

- a. Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the preconstruction conference. This includes the project superintendent, site safety and health officer, quality control supervisor, or any other assigned safety and health professionals who participated in the development of the APP (including the Activity Hazard Analyses (AHAs) and special plans, program and procedures associated with it).
- b. The Contractor shall discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, a schedule for the preparation, submittal, review, and acceptance of AHAs shall be established to preclude project delays.
- c. Deficiencies in the submitted APP will be brought to the attention of the Contractor at the preconstruction conference, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Work shall not begin until there is an accepted APP.

## 1.6 ACCIDENT PREVENTION PLAN (APP)

The Contractor shall use a qualified person to prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of USACE EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in USACE EM 385-1-1, Appendix A, "Minimum Basic Outline for Accident Prevention Plan". Specific requirements for some of the APP elements are described below. The APP shall be job-specific and shall address any unusual or unique aspects of the project or activity for which it is written. The APP shall interface with the Contractor's overall safety and health program. Any portions of the Contractor's overall safety and health program referenced in the APP

shall be included in the applicable APP element and made site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP shall be signed by the person and firm (senior person) preparing the APP, the Contractor, the on-site superintendent, the designated site safety and health officer and any designated CSP and/or CIH.

Submit the APP to the Contracting Officer 15 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP.

Once accepted by the Contracting Officer, the APP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the accepted APP will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified.

Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and quality control manager. Should any hazard become evident, stop work in the area, secure the area, and develop a plan to remove the hazard. Notify the Contracting Officer within 24 hours of discovery. Eliminate/remove the hazard. In the interim, all necessary action shall be taken to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by ANSI/ASSE A10.34,) and the environment.

Copies of the accepted plan will be maintained at the resident engineer's office and at the job site. The APP shall be continuously reviewed and amended, as necessary, throughout the life of the contract. Unusual or high-hazard activities not identified in the original APP shall be incorporated in the plan as they are discovered.

# 1.7 ACTIVITY HAZARD ANALYSIS (AHA)

The Activity Hazard Analysis (AHA) format shall be in accordance with USACE EM 385-1-1. Submit the AHA for review at least 15 calendar days prior to the start of each phase. Format subsequent AHAs as amendments to the APP. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.

The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.

The activity hazard analyses shall be developed using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHAs will be developed by the contractor, supplier or subcontractor and provided to the prime contractor for submittal to the Contracting Officer.

## 1.8 DISPLAY OF SAFETY INFORMATION

Within 5 calendar days after commencement of work, erect a safety bulletin board at the job site. The safety bulletin board shall include information and be maintained as required by EM 385-1-1, section 01.A.06.

## 1.9 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in the article "References." Maintain applicable equipment manufacturer's manuals.

## 1.10 EMERGENCY MEDICAL TREATMENT

Contractors will arrange for their own emergency medical treatment. Government has no responsibility to provide emergency medical treatment.

## 1.11 REPORTS

# 1.11.1 Accident Reports

- a. For recordable injuries and illnesses, and property damage accidents resulting in at least \$2,000 in damages, the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the USACE Accident Report Form 3394 and provide the report to the Contracting Officer within 5 calendar day(s) of the accident. The Contracting Officer will provide copies of any required or special forms.
- b. For any weight handling equipment accident (including rigging gear accidents) the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident and provide the report to the Contracting Officer within 30 calendar days of the accident. Crane operations shall not proceed until cause is determined and corrective actions have been implemented to the satisfaction of the Contracting Officer.

## 1.11.2 Accident Notification

Notify the Contracting Officer as soon as practical, but not later than four hours, after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than \$2,000, or any weight handling equipment accident. Information shall include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

# 1.11.3 Monthly Exposure Reports

Monthly exposure reporting to the Contracting Officer is required to be attached to the monthly billing request. This report is a compilation of employee-hours worked each month for all site workers, both prime and subcontractor. The Contracting Officer will provide copies of any special forms.

# 1.11.4 Crane Reports

Submit crane inspection reports required in accordance with USACE EM 385-1-1, Appendix H and as specified herein with Daily Reports of Inspections.

## PART 2 PRODUCTS

Not used.

## PART 3 EXECUTION

#### 3.1 EQUIPMENT

# 3.1.1 Weight Handling Equipment

- a. Cranes and derricks shall be equipped as specified in EM 385-1-1, section 16.
- b. The Contractor shall comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Erection shall be performed under the supervision of a designated person (as defined in ASME B30.5). All testing shall be performed in accordance with the manufacturer's recommended procedures.
- c. The Contractor shall comply with ASME B30.8 for floating cranes and floating derricks.
- d. Under no circumstance shall a Contractor make a lift at or above 90% of the cranes rated capacity in any configuration.
- e. When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and shall follow the requirements of USACE EM 385-1-1 section 11 and ASME B30.5 or ASME B30.22 as applicable.
- f. Portable fire extinguishers shall be inspected, maintained, and recharged as specified in NFPA 10, Standard for Portable Fire Extinguishers.
- g. All employees shall be kept clear of loads about to be lifted and of suspended loads.
- $\ensuremath{\text{h.}}$  The Contractor shall use cribbing when performing lifts on outriggers.
- i. The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.
- j. A physical barricade must be positioned to prevent personnel from entering the counterweight swing (tail swing) area of the crane.
- k. Certification records which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane that was inspected shall always be available for review by Contracting Officer personnel.
- 1. Written reports listing the load test procedures used along with

any repairs or alterations performed on the crane shall be available for review by Contracting Officer personnel.

 ${\tt m.}$  Certify that all crane operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

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# DIVISION 01 - GENERAL REQUIREMENTS

# SECTION 01545

# DREDGING PLANT AND EQUIPMENT

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## SECTION 01545

## DREDGING PLANT AND EQUIPMENT

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CORPS OF ENGINEERS (COE)

EM 385-1-1

(2003) Safety and Health Requirements Manual

## 1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

## SD-01 Preconstruction Submittals

Plant and Equipment

Submit a schedule of the plant and equipment the Contractor will employ in the performance of the work of this contract. Submit also copies of all applicable inspections and certifications for all floating plant and equipment.

# 1.3 PLANT AND EQUIPMENT

# 1.3.1 Sufficient Capacity

The Contractor shall keep on the job sufficient plant and equipment to meet the requirements of the work. The plant and equipment shall be in satisfactory operating condition and be capable of safely and efficiently performing the work. The plant and equipment shall be subject to inspection by the Contracting Officer and/or his representatives at all times.

# 1.3.2 Minimum Capacity

The plant and equipment listed on the Plant and Equipment Schedule submitted with the Contractor's bid is the minimum which the Contractor shall place and keep on the job unless otherwise determined by the Contracting Officer. The listing of plant and equipment is not to be construed as an agreement on the part of the Government that the equipment is adequate to perform the required work.

# 1.3.3 Reduction in Capacity

No reduction in the capacity of the plant and equipment employed on the work shall be made except by written permission of the Contracting Officer. The measure of the capacity of the plant and equipment shall be its actual performance on the work covered by this contract.

# 1.3.4 Inspections and Certifications

Prior to commencement of work at the site, the Contractor shall make available to the Contracting Officer Representative for review, copies of all applicable inspections and certifications of floating plant and equipment as required by Federal, State and local laws and regulations. See EM 385-1-1, Sections 16 and 19. Such inspections and certifications shall be current and maintained in force for the duration of this contract. Each item of floating plant and equipment shall have on board a waste oil management plan which details the intended disposal method for waste oil.

# 1.4 LICENSE REQUIREMENTS

Each vessel exceeding twenty-six feet in length, excluding sheer, which is used for pushing, hauling alongside, or any other method of towing, and not required by law to have a valid Certificate of Inspection by the U.S. Coast Guard, shall be under the actual direction and control of a person licensed for towing in the geographic area of the work by the U.S. Coast Guard. Licensed persons shall not perform command or other duties in excess of twelve hours in any consecutive twenty-four hour period except in an emergency.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

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## SECTION 01723

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## SECTION 01723

## FIELD ENGINEERING FOR DREDGING

## PART 1 GENERAL

## 1.1 SUMMARY

# 1.1.1 Engineering Services

The Contractor shall furnish the required personnel, equipment, instruments, and transportation, as necessary to accomplish all required surveys. Reports and other data together with supporting material developed during the prosecution of the work shall be furnished to the Contracting Officer. The Contractor shall also provide adequate professional supervision and quality control to assure the accuracy, quality, completeness, and progress of the work.

The Contractor shall provide and pay for the following field engineering services for the project:

- a. Hydrographic and other survey work specified or required in execution of this project, except for surveys performed by the Government, as indicated in these specifications.
- b. Civil, structural or other professional engineering services specified, or required to execute Contractor's construction methods.

#### 1.2 REFERENCES

The publications listed below form a part of this section to the extent referenced. The publications are referenced in the text by basic designation only. The Army Corps of Engineers references below may be viewed or downloaded free of charge via the Internet (http://www.hnd.usace.army.mil/techinfo/).

# U.S. ARMY CORPS OF ENGINEERS

EM 1110-1-1002	(1996)	SURVEY MARKERS AND MONUMENTATIONS
EM 1110-2-1003	(2002)	HYDROGRAPHIC SURVEYING
EM 1110-1-2909	(1998;	Chg 2) Geospatial Data and Systems

## 1.3 DEFINITIONS

# 1.3.1 Survey Datum

The contract drawings refer to Mean Low Water (MLW). The Government will and the Contractor shall perform all surveys using the Mean Lower Low Water (MLLW) datum. A table of "TIDAL DATUM PLANES" for conversion of MLW to MLLW is shown on the drawings. The Contractor shall calibrate GPS equipment to the Corps of Engineers existing horizontal control net indicated on the drawings.

### 1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Survey Plans; G, RO

The Contractor shall submit, as part of the Quality Control Plan, a detailed plan describing the survey methods to be used during the work. The plan shall include the equipment to be utilized, tidal data, general site plan map, line designation map, calibration procedures to be used, expected horizontal and vertical accuracies, and pertinent information to describe the methods, and results to be obtained. Field surveys shall not begin until these plans are approved.

Layout Plan; G, RO

A complete plan of the dredging areas showing the horizontal layout of all physical and electronic ranges to be used for horizontal control. The drawings shall be drawn at a scale sufficiently large to show all pertinent details. The drawings shall be submitted as blue or black lines on a white background.

Charts

Current and tide charts to be used for the areas being dredged shall be submitted.

Survey Personnel

Furnish a listing of the personnel who will perform the survey work required by this contract. The listing shall include a brief summary of the hydrographic survey experience of each person. The list shall be submitted prior to the preconstruction conference.

SD-05 Design Data

Field Survey Data

Submit field data; depth sounder rolls, corrected for tide, and corresponding boat plots; daily logs; and quantity computations. Submit data sufficient for the Government to reproduce the Contractor's survey plot by referring only to this field data.

The electronic field data, including XY coordinates (points), and Z depths (elevations) in ASCII file format, shall be submitted on a daily basis with the CQC reports. Deficiencies shall be corrected and a re-survey of the area shall be performed, as necessary to ensure correction has been achieved. Data shall be submitted in a readable and usable format, utilizing industry recognized standard file formats and extensions. Data shall be submitted with a commercially available software program and technical support to provide the on-site capability to read and print the data.

Electronic Tracking System

The Contractor shall furnish required discs, CD-ROM, and charts to the Contracting Officer.

#### 1.5 GENERAL HYDROGRAPHIC SURVEY REQUIREMENTS

All hydrographic surveys for this project shall follow the mandatory criteria given in EM 1110-2-1003 for the "Navigation and Dredging Support Surveys" class of survey as a minimum.

Survey lines may be run either perpendicular to the channel limits at 50 foot offsets or longitudinal at 25 foot offsets. The lines shall clearly identify the toe and extend out to a minimum of three times the project depth to accurately depict the side slope.

## 1.6 HORIZONTAL POSITIONING PROCEDURES AND ACCURACIES

- a. Vessel positioning systems utilized on this contract shall conform to the allowable horizontal positioning criteria in EM 1110-2-1003. The positioning system used shall be capable of meeting or exceeding the accuracy requirements and shall not exceed the allowable ranges where indicated. The Contractor may be required to demonstrate to the Government that its positioning system is capable of meeting or exceeding the accuracy requirements in EM 1110-2-1003.
- b. All dredges, all survey vessels, and all towing equipment engaged in transport of dredged material, shall be equipped with automated electronic positioning and progress track-plotting equipment having a degree of accuracy commensurate with EM 1110-2-1003. In addition, dredges shall have production recording and efficiency optimizing data collection equipment; capable of storing, plotting, and printing in-situ operational data.
- 1.7 ELECTRONIC TRACKING SYSTEM (ETS) FOR DREDGING AND OCEAN DISPOSAL VESSELS

The Contractor shall furnish an Electronic Tracking System (ETS) for surveillance of the movement and disposition of dredged material during excavation, ocean transit and disposal. This ETS shall be established, operated and maintained by the Contractor to continuously track in real-time the horizontal location and draft condition of the disposal vessel for the entire dredging cycle, including dredging area and disposal area.

### 1.7.1 ETS Standards

The Contractor shall provide an automated computer system and components to perform in accordance with EM 1110-1-2909. A copy of the EM can be downloaded at http://www.usace.army.mil/inet/usace-docs/eng-manuals. Horizontal location shall have an accuracy equal to +/- 10 feet (horizontal repeatability). Vertical (draft) data shall have an accuracy of +/- 0.5 foot. Horizontal location and vertical data shall be collected in sets and each data set shall be referenced in real-time to date and local time (to nearest minute), and shall be referenced to the same state plane coordinate system used for the survey(s) shown in the contract plans. The ETS shall be calibrated as required, in the presence of the Contracting Officer at the work location before disposal operations have started, and at 30-day intervals while work is in progress. The Contracting Officer shall have access to the ETS in order to observe its operation. Disposal operations

will not commence until the ETS to be used by the Contractor is certified by the Contracting Officer to be operational and within acceptable accuracy. It is the Contractor's responsibility to select a system that will operate properly at the work location. The complete system shall be subject to the Contracting Officer's approval.

## 1.7.2 Data Requirements and Submissions

All data shall be collected and stored on 3-1/2 inch disks or CD-ROM in ASCII format using IBM-compatible MS-DOS 5.0 or later version. Data shall include date, time, trip ID number, vessel name and name of vessel's captain, location and draft of disposal vessel every 500 feet (at least) during loading cycle and during travel to disposal area, and every minute (at least) or every 200 feet of travel, whichever is smaller, while approaching within 1000 feet and within limits of disposal area. Data collected while the disposal vessel is in the vicinity of the disposal area shall also be plotted in chart form, in 200-foot intervals, to show the track and draft of the disposal vessel approaching, traversing, and leaving the disposal area. More than one disposal area trip may be stored on a single disk or CD ROM as long as trip data is indexed and clearly identifiable. The completed, original disk or CD- ROM shall be furnished to the Contracting Officer within 24 hours. Plotted charts shall be organized and maintained at a central work location for inspection on a daily basis by the Contracting Officer. Plotted charts shall be organized as directed, bound and submitted weekly to the Contracting Officer for permanent file record.

#### 1.7.3 ETS

The ETS for each disposal vessel shall be in operation for all dredging and disposal activities and shall record the full round trip for each loading and disposal cycle. The Contracting Officer shall be notified immediately in the event of ETS failure and all dredging operations for the vessel shall cease until the ETS is fully operational. Any delays resulting from ETS failure shall be at the Contractor's expense.

## 1.8 REFERENCE HORIZONTAL CONTROL DATA

At the preconstruction conference, the Contracting Officer will provide project control from which hydrographic surveys may be extended. This control shall be presumed to meet the accuracy requirements in EM 1110-2-1003. The Contractor shall immediately notify the Contracting Officer if existing control points have been disturbed. In the event new station monumentation is required to perform the work, new stations shall be monumenteted in accordance with EM 1110-1-1002 criteria, and an equitable adjustment will be made to the contract.

## 1.9 DEPTH MEASUREMENT PROCEDURES AND CALIBRATION

## 1.9.1 Depth Measurement Precision and Accuracy

Depth measurements including depth observation precision and resolution shall meet the vertical accuracy standards prescribed in EM 1110-2-1003.

## 1.10 VERTICAL REFERENCE DATUMS

Depth measurements shall be reduced to the specified datum using concurrent staff/gage readings, as described in EM 1110-2-1003. Tide staffs/gages shall be constructed, referenced, maintained, stilled, and read in

accordance with the criteria in EM 1110-2-1003.

1.11 FIELD DATA RECORDING, REDUCTIONS, ARCHIVING, AND PLOTTING REQUIREMENTS.

The data format fields for submitting reduced hydrographic data to the District is  $x\ y\ z$ . The topographic and feature data shall conform to the intergraph general 3D design file formats specified in the reference. Digital data shall be contained on a 3.5 inch floppy disk or CD-ROM.

#### 1.12 VOLUME COMPUTATIONS

The Contractor shall have the capability to compute excavation quantities from work performed under this contract. The Contracting Officer will furnish construction templates and limits from which volumes are to be computed using any of the techniques given in EM 1110-2-1003. Section drawings shall be made at the horizontal and vertical scales given in EM 1110-2-1003.

#### 1.13 MISCELLANEOUS QUALITY CONTROL PROCEDURES

## 1.13.1 Automated System Synchronization Checks

Each automated hydrographic survey system shall be checked to insure adequacy of correlation between position and depth. Methods for performing this check are given in EM 1110-2-1003.

## PART 2 PRODUCTS (NOT USED)

#### PART 3 EXECUTION

## 3.1 CONTRACTOR SURVEYS

## 3.1.1 Survey Personnel

The Contractor survey work to be performed under this contract shall be accomplished by, or reviewed and approved by a surveyor familiar with and having personal experience with hydrographic surveys. In addition, the survey personnel shall also be familiar with and have personal experience with hydrographic surveys.

## 3.1.2 Contractor Quality Control Surveys

The Contractor shall examine his work by conducting hydrographic surveys at no more than 30-day intervals, upon completion of separable portions of the work, and upon completion of the entire work. Contractor quality control surveys shall also be performed and submitted to the Contracting Officer prior to any request for a Government survey for final acceptance. The Contractor shall prepare survey maps based on the results of these surveys. These maps shall be used, by the Contractor, to satisfy himself of the effectiveness of his operations. Attainment of contract depth shall be verified, and a comparison of actual progress and in-place quantities dredged with scheduled progress shall be performed. Contractor surveys will not be used for final payment or acceptance. See Section 02325 DREDGING for additional Contractor survey requirements.

## 3.1.3 Contractor Progress Payment Surveys

The Contractor shall conduct surveys for any periods for which progress payments are requested. The Contractor will make the computations based on

these surveys. All surveys accomplished by the Contractor shall be conducted under the direction of the Contracting Officer, unless the Contracting Officer waives this requirement for each specific instance. Promptly upon completing a survey, the Contractor shall furnish the all data relating to the survey to the Contracting Officer, who will use the data as necessary to determine the amount of progress payments.

## 3.2 GOVERNMENT SURVEYS

## 3.2.1 Government Quantity Surveys

The Contracting Officer will conduct the original and final surveys for all dredging areas and make all quantity computations based on those surveys. The surveys will be performed at no expense to the Contractor, except as noted in paragraph "Final Examination and Acceptance" below and as specified in Section 02325 DREDGING. The Contractor shall give a minimum of 3 days notice before completion of a portion of the work requiring a post-dredge survey. A minimum of 2 days will be required by the Government for completion of each of the post-dredge surveys at the site and another 10 to 15 days for calculation of quantities removed and verification of completion of work.

All quantity estimates for dredged material removed will be determined using either single beam or multi-beam survey technology. If single beam technology is used, all edited sounding information obtained from Government pre and post dredge surveys will be used in determining the payable quantity of dredged material removed. If multi-beam survey technology is used, then a 3-foot by 3-foot matrix using the sounding closest to cell center (shot depth) will be generated from the edited multi-beam data and used in determining the payable quantity of dredged material removed. A Digital Terrain Model (DTM) will be created from each of the pre and post dredge surveys. A channel design template will be created at the required dredging depth and at the total allowable overdepth. Each of the channel design templates will be compared with the pre dredge DTM to determine the available quantity of required dredge material and available quantity of overdepth material. The same channel design templates will be compared to the post dredge DTM to determine the quantity of material remaining above the required dredging depth and the quantity of material remaining above the total allowable overdepth. The quantity of required dredged material removed will be derived from these comparisons. If the "box-cutting method of dredging is used to remove dredge material contained in side slopes where "box-cutting is permitted, the channel design templates will be modified to include a "box-cut" width. In all cases, the same channel design templates will be used to determine both the pre and post dredge quantities. Material removed below the total allowable overdepth will not be included in the payable quantity of material.

## 3.2.2 Final Examination by the Government

- a. Submission of all Contractor quality control survey data, including plots, is required prior to performance of final examination and acceptance surveys by the Government.
- b. As soon as practicable after completion of the entire work or any section thereof such work will be thoroughly examined at the expense of the Government by sounding or sweeping, or both, as determined by the Contracting Officer. Should any shoals, lumps, or other lack of contract depth be disclosed by this examination the Contractor will be required to

remove the shoals by dredging at the contract rate for dredging. If the bottom is soft and the shoal areas are small and form no material obstruction to navigation, the removal of such shoal may be waived at the discretion of the Contracting Officer. Dragging the bottom to remove lack of contract depth will not be permitted. The Contractor will be notified when soundings and/or sweepings are to be made, and may be permitted to accompany the survey party if approved by the Contracting Officer. When the area is found to be in a satisfactory condition, it will be accepted finally. Should more than one sounding or sweeping operation by the Government over an area be necessary by reason of work for removal of shoals disclosed by a prior sounding or sweeping, the cost of such second and any subsequent sounding or sweeping operations will be charged against the Contractor. The rate for each day in which the Government survey plant is engaged in such sounding or sweeping operations and/or is en route to or from the site, or is held, for the Contractor's convenience at or near the site for these operations, shall be \$2,400.00.

## 3.2.3 Final Acceptance by the Government

Final acceptance of the whole or any part of the work, and the deductions or corrections of deductions made thereon will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error.

-- End of Section --

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#### SECTION 02325

#### DREDGING

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#### SECTION 02325

#### DREDGING

#### PART 1 GENERAL

#### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

CORPS OF ENGINEERS (COE)

COE EM-385-1-1

(2003) Safety and Health Requirements Manual

#### 1.2 RELATED WORK SPECIFIED ELSEWHERE

## 1.2.1 Environmental Protection Requirements

- a. Provide and maintain during the life of the contract, environmental protective measures. Also, provide environmental protective measures required to correct conditions, such as oil spills or debris, that occur during the dredging operations. Comply with Federal, State, and local regulations pertaining to water, air, and noise pollution. See Section 01355 ENVIRONMENTAL PROTECTION.
- b. Requirements relative to protection marine mammals are specified in Section 01355 ENVIRONMENTAL PROTECTION.

## 1.2.2 Underwater Diving Operations

In the event that underwater diving operations become necessary due to the work of this contract, such operations shall be conducted in accordance with CORPS OF ENGINEERS (COE) COE EM-385-1-1 Section 30.

## 1.3 DEFINITIONS

## 1.3.1 Maintenance Material

Maintenance material is defined as the shoals and silty sediments that have accumulated within the Federal Channel, Turning Basin and Maneuvering Area since completion of the last maintenance dredging. Maintenance material also includes accumulated silty sediment material that sloughs off the dredging area side slopes.

#### 1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be

submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Work Plan; G, RO.

The Contractor shall submit a work plan for accomplishing the dredging work of this contract. The following items shall be considered, at a minimum, for inclusion in the work plan:

- a. Anticipated plant and equipment;
- b. expected coordination requirements;
- c. survey requirements;
- d. proposed measures for avoiding damage to adjacent structures and banks of the dredging areas; and
- e. proposed measures to avoid overdredging.

Enclosed, Clamshell Bucket Performance Data; G, DO

Submit Enclosed Clamshell Bucket Performance Data to the Contracting Officer of approval before commencement of work.

Debris Management Plan.

A debris management plan shall be developed as specified in this section and submitted to the Contracting Officer for review.

Inspection of Disposal.

Submit names of inspectors certified by the Corps of Engineers to be used for monitoring disposal activities for the Government.

Scow Cards.

Submit scow cards for each scow to be used for contract work. Scow cards shall have information specified in paragraph "Scows."

SD-05 Design Data

Equipment and Performance Data

The Contractor shall furnish proof of electronic positioning equipment calibration to the Contracting Officer.

Daily/Monthly Report of Operations

The Contractor shall prepare and submit two (2) copies of the Daily Report of Operations, using ENG Form No. 27A and/or ENG Form No. 4267, for each dredge. Reports shall be submitted on a daily basis. A copy of these forms are appended to the end of this Section. In addition to the daily reports, the Contractor shall prepare a Monthly Report of Operations for each month or partial month's work on either ENG Form No. 27A or ENG Form No. 4267. The monthly report shall be submitted to the Contracting Officer on or before the 7th of each month, consolidating the previous month's work. Upon completion of the project, the Contractor shall submit a consolidated project report, combining the monthly reports.

Additionally, one copy of the reports shall be maintained by the Contractor on the dredge(s) for the Contracting Officer's inspection purpose. Further

instructions on the preparation of the reports will be furnished at the Preconstruction Conference.

#### 1.5 NOTIFICATIONS

## 1.5.1 Notice of Misplaced Material

The Contractor shall notify the Contracting Officer and the U.S. Coast Guard Marine Safety Office of any misplaced material.

## 1.5.2 Notice of Need for Dredging Survey

The Contractor shall give advance notice to the Contracting Officer of the need for a after-dredging survey for final acceptance for each acceptance section. See Section 01723FIELD ENGINEERING FOR DREDGING, Article GOVERNMENT SURVEYS.

## 1.5.3 Relocation of Navigation Aids

The Contractor shall not remove, change the location of, obstruct, willfully damage, make fast to, or interfere with any aid to navigation. The Contractor shall notify the Coast Guard District Commander, in writing, with a copy to the Contracting Officer, 30 days in advance of the time he plans to dredge adjacent to any aids which require relocation to facilitate the dredging operation. A copy of the notification shall be provided to the Contraction Officer.

## 1.6 MATERIAL TO BE REMOVED

## 1.6.1 Character of Materials to be Removed

The material to be removed to accomplish the specified dredging work is anticipated to be fine sand mixed with organic silt. The Contractor is expected to examine the site of the work and decide the character of the material for himself. Although the material is predominately fine sand mixed with organic silt, the presence of boulders and hard digging is to be expected in some areas of the project.

## 1.6.2 Results of Explorations

Explorations to determine the character of materials to be removed have been made by the Government for selected areas of this project. Grain size analysis curves are attached at the end of this section. Although the results of such explorations are representative of subsurface conditions at their respective locations and for their respective vertical reaches, local variations in the subsurface materials are to be expected and, if encountered, will not be considered materially different within the purview of the contract.

## 1.7 WORK AREA

#### 1.7.1 Access

The Contractor shall be responsible for providing and maintaining access necessary for his equipment and plant to and from the work site, mooring area, and disposal area. The Contractor shall ascertain the environmental conditions which can affect the access such as climate, winds, currents, waves, depths, shoaling, and scouring tendencies.

## 1.7.2 Protection of Existing Waterways

The Contractor shall conduct his operations in such a manner that material or other debris are not pushed outside of dredging limits or otherwise deposited in existing side channels, basins, docking areas, or other areas being utilized by vessels. The Contractor will be required to change his method of operations as may be required to comply with the above requirements. Should any bottom material or other debris be pushed into areas described above, as a result of the Contractor's operations, the material must be promptly removed at no expense to the Government.

## 1.7.3 Adjacent Property and Structures

The Contractor shall conduct the dredging operation such that it does not undermine, weaken or otherwise impair existing structures located in or near the areas to be dredged. The Contractor shall investigate the existing structures at the site and plan the dredging work accordingly.

Damage to private or public property or structures resulting from the disposal or dredging operations shall be repaired promptly by the Contractor at his expense. Damage to structures resulting from the Contractor's negligence will result in suspension of dredging and require prompt repair at the Contractor's expense as a prerequisite to the resumption of dredging.

## 1.7.4 Artificial Obstructions

Except as indicated, the Government has no knowledge of cables, pipes, or other artificial obstructions or of any wrecks, wreckage, or other material that would necessitate the use of explosives or the employment of additional equipment for economical removal. If actual conditions differ from those stated or shown, or both, an adjustment in contract price or time for completion, or both, will be made in accordance with "FAR 52.236-2, Differing Site Conditions."

## 1.7.5 Existing Utilities

## 1.7.5.1 Protection of Utility Lines

Existing utility lines that are shown on the drawings or the locations of which are made known to the Contractor prior to dredging, and that are to be retained, shall be protected from damage during dredging, and if damaged, shall be satisfactorily repaired by the Contractor at no additional cost to the Government. Prior to commencement of dredging, the Contractor shall coordinate with the Contracting Officer and the applicable utility company to mark the exact locations of existing utilities, and establish in detail the proposed method of protecting the existing utilities. In the event that the Contractor damages any existing utility lines that are not shown on the drawings or the locations of which are not known to the Contractor, report thereof shall be made immediately to the Contracting Officer. If the Contracting Officer determines that repairs shall be made by the Contractor, such repairs will be ordered under the Contract Clause entitled "DIFFERING SITE CONDITIONS."

## 1.8 QUANTITY OF MATERIAL

The total estimated amount of material to be removed from within the specified limits, including side slopes and allowable overdepths is shown on the Bidding schedule. The estimated quantity for bidding purposes and

for application of the "VARIATIONS IN ESTIMATED QUANTITIES — SUBDIVIDED ITEMS (MAR 1995) — EFARS 52.212-5001" clause shall be the total quantity, including overdepth. The quantities listed are estimates only. Within the limits of available funds, complete the work specified whether the quantities involved are greater or less than those estimated.

#### 1.9 OVERDEPTH AND SIDE SLOPES

## 1.9.1 Allowable Overdepth

To cover the unavoidable inaccuracies of dredging processes, material removed to the overdepth shown on the drawings will be measured and paid for at full contract price. Overdepth material will only be measured and paid for when removed from within the limits of bottom material required to be dredged to achieve project depth,

### 1.9.2 Side Slopes

Material dredged to provide for final indicated side slopes will be measured and paid for at the applicable unit price. Dredging on side slopes shall follow, as closely as practicable, the lines indicated on the drawings. Dredging the space below the indicated slope plane at the bottom of the slope for upslope material capable of falling into the cut will not be permitted.

## 1.9.3 Excessive Dredging

Material taken from beyond the limits of required dredging shown on the drawings will be deducted from the total amount dredged as excessive overdepth dredging, or excessive side-slope dredging for which payment will not be made.

### 1.10 GOVERNMENT FIELD OFFICE

If hopper dredges are used for dredging, the Contractor shall provide office space for the Government on-board each dredge. The Contractor shall provide all services and supplies in connection with maintaining the office including cleaning, heating, lighting, water supply, and sanitary services.

### 1.11 INSPECTION

Inspect the work, keep records of work performed, and ensure that gages, targets, ranges, and other markers are in place and usable for the intended purpose. See Section 01451 CONTRACTOR QUALITY CONTROL.

## 1.11.1 Method of Communication

Provide a system of communication between the dredge crew, towboats, the Marine Mammal Observer, the disposal inspector, and the Contracting Officer. Portable two-way marine radios are acceptable.

## 1.11.2 Transportation

The Contractor shall furnish, at the request of the Government Representative or Marine Mammal Observer, the use of such boats, boatmen, laborers, and material forming a part of the ordinary and usual equipment and crew of the equipment or marine plant as may be reasonably necessary in inspecting and monitoring the work. The Contractor shall furnish, on the request of the Government Representative or Marine Mammal Observer,

suitable transportation from all points on shore designated by the Contracting Officer to and from the various pieces of plant, and the work site.

#### 1.12 DEBRIS MANAGEMENT PLAN

A debris management plan shall be developed, reviewed by the Contracting Officer and followed by the Contractor. Debris removed from the bottom during dredging operations, which is not suitable for disposal at the Massachusetts Bay Disposal Site (MBDS), shall be collected and removed from the site. Unsuitable materials include large items such as timbers, pilings, sections of piers, and metallic debris. Generally, all floating debris and bottom debris larger than 10 feet in any dimension will be considered unsuitable for ocean dumping. Each day during dredging operations, the Contractor shall use a boat to collect and remove floating debris resulting from project activities. Floating debris shall also be removed from within barges, if applicable. Debris removed from the bottom during dredging operations, shall also be collected and removed from the site. Containers for temporary storage of the collected debris shall be maintained on the dredge or support barge.

## 1.13 INSPECTION OF DISPOSAL

No disposal shall be done unless a Corps of Engineers Certified Inspector is present. The inspector shall be available on a full-time basis to cover all phases of operations in connection with disposal of the dredged materials. The Corps of Engineers Certified Inspector and the Marine Mammal Observer may be the same person.

The Contractor shall be responsible for and provide qualified disposal inspection services at no additional cost to the Government. The Contractor shall notify the Contracting Officer of the names of the Corps of Engineers Certified inspectors to be used prior to commencement of work. Every discharge of dredge material must be officially witnessed and properly documented by an onboard inspector who has been trained by, and who holds a current certification from the New England District, Army Corps of Engineers. Failure to adhere to this requirement will be considered a serious violation of this contract and cause for an immediate stop-work order by the Contracting Officer and which could precipitate substantial penalties including but not necessarily limited to fines, withholding of funds and non-payment due to misplaced materials.

## PART 2 PRODUCTS (Not Used)

### PART 3 EXECUTION

## 3.1 CONDUCT OF DREDGING WORK

### 3.1.1 Order of Work

- a. The Contractor shall start and complete the work in the order of precedence as identified below. The Government reserves the right to change the order of work at any time. The Contractor shall fully coordinate all work with the Harbormaster.
- b. In order to protect the winter flounder and anadromous fish, the Contractor shall begin dredging in the upstream end of the Federal Navigation Project and proceed seaward until the work is complete. The dredging performed by all dredges shall be continuous within reaches as

approved by the Contracting Officer.

c. The Contractor shall prepare and submit to the Contracting Officer for review and approval a progress schedule in accordance with Section 01110, Paragraph "Work Sequence."

## 3.1.2 Method of Dredging - Mechanical/Hopper Dredge

Dredging under this contract shall be performed using a mechanical type of dredges and scows or hopper dredges, or a combination of mechanical dredges and hopper dredges, at the Contractor's Option.

## 3.1.3 Method of Disposal

- a. Provide for safe transportation and disposal of dredged materials. Transport and dispose of dredged material at the Massachusetts Bay Disposal Site (MBDS). The location of the disposal site is shown on the drawing attached at the end of this section. The disposal point will be marked by a buoy. Coordinates of the buoy location will be specified at the time a disposal inspector is approved by the Contracting Officer. All disposal shall be done at the buoy with the scow or hopper at a complete halt. This requirement must be followed except when weather or sea state create unsafe conditions, in which case disposal within 100 feet of the buoy with the scow or hopper moving only fast enough to maintain safe control (generally less than one knot) will be permitted. Disposal shall not be attempted if the above conditions cannot be met. Anticipated weather conditions shall be determined prior to departing for the disposal site.
- b. Deposit dredged material by self-dumping scow, barge or hopper. Do not remove loaded or partially loaded vessels from the dredge area until the load has been measured by the Contracting Officer. Notify the Contracting Officer when vessels are returned to the dredge area.

## 3.1.4 Misplaced Material Disposal

Material that is deposited elsewhere than in locations designated or approved by the Contracting Officer will not be paid for and the Contractor shall be required to remove such misplaced material and deposit it where directed at his expense.

#### 3.1.5 Interference with Navigation

Minimize interference with the use of channels and passages. The Contracting Officer will direct the shifting or moving of dredges or the interruption of dredging operations to accommodate the movement of vessels and floating equipment, if necessary. The Contractor shall comply with all requests from the Contracting Officer to move or interrupt dredging operations for a reasonable time period at on no additional cost to the Government.

## 3.1.6 Ranges, Gages, and Lines

Furnish, set, and maintain ranges, buoys, and markers needed to define the work and to facilitate inspection. Establish and maintain gages in locations observable from each part of the work so that the depth may be determined. Suspend dredging when the gages or ranges cannot be seen or followed. The Contracting Officer will furnish, upon request by the Contractor, survey lines, points, and elevations necessary for the setting of ranges, gages, and buoys.

## 3.1.7 Debris Management

Debris removed from the bottom during dredging operations, which is not suitable for disposal at the Massachusetts Bay Disposal Site (MBDS), shall be collected and removed from the site. A debris management plan shall be developed, reviewed by the Contracting Officer and followed by the Contractor. Each day during dredging operations, the Contractor shall use a boat to collect and remove floating debris resulting from project activities. Floating debris shall also be removed from within scows or barges. Containers for temporary storage of the collected debris shall be maintained on the dredge or support barge.

## 3.1.8 Lights

Each night, between sunset and sunrise and during periods of restricted visibility, provide lights for floating plant, ranges, and markers. Also, provide lights for buoys that could endanger or obstruct navigation. When night work is in progress, maintain lights from sunset to sunrise for the observation of dredging operations. Lighting shall conform to United States Coast Guard requirements for visibility and color.

#### 3.2 PLANT

## 3.2.1 Dredging Plant

Most of the shoaling is located in the upper reaches of the Federal Navigation Project, upstream of Fort Point, in Weymouth. In addition there are spot shoals in various places in the channel seaward of Kings Cove that shall be removed. The Contractor shall use a mechanical dredge with an enclosed bucket and no overflow from the scow, or a hopper dredge with no overflow. However, a backhoe on a barge or similar equipment may be used to remove material underneath the Washington Street Bridge. This equipment shall be used because of the limited height of the bridge and to avoid restrictions with opening and closing the bridge. Also hard material located in the navigation channel near Georges's Island and off of Wessagussett Beach may be removed with a conventional open tooth clamshell bucket or backhoe. Barge and hopper dredge overflow will not be allowed during filling or transport of material to the disposal area.

## 3.2.2 Enclosed Clamshell Bucket

To the extent practicable, mechanical dredging in all of the areas indicated on the drawings shall be performed using an enclosed clamshell bucket. The enclosed dredge bucket shall be designed to completely enclose the dredged sediment and water captured. The bucket shall not have teeth. The bucket shall be equipped with escape valves which shut when the bucket is withdrawn from the water column. Submit Enclosed, Clamshell Bucket Performance Data to the Contracting Officer for approval before commencement of work.

## 3.2.2.1 Enclosed Clamshell Bucket Control

The Contractor shall demonstrate that the dredge operator has sufficient control over bucket depth in the water and bucket closure so that sediment re-suspension from bucket contact with the bottom and due to bucket over-filling can be minimized.

## 3.2.3 Tow Boats and Hopper Dredges

All tow boats and hopper dredges used for disposal of dredged material shall be equipped with DGPS navigational equipment, radar, corrected compass, marine radio, and depth sounding equipment which is to be maintained in operating condition during each disposal operation. The tow boats or hopper dredges utilized by the Contractor for this purpose shall be of a size adequate for operating in heavy seas and shall have necessary reserve power for maneuvering with in rough seas and under emergency conditions as well as for control at the disposal point.

#### 3.2.4 Scow Cards

The Contractor shall provide and maintain markings on all scows clearly indicating the draft of the scow and shall provide scow cards for each scow used on the contract work. The scow cards shall show dimensions and volumes of individual pockets of scows and total volumes for varying depths below coaming or top of pockets. This is to enable Government personnel to make a determination of scow volume and corresponding drafts under partial and full load conditions. These measurements are to be made at the time of initial use of each scow. This information will then be furnished to disposal inspectors to enable them to estimate scow volume from draft of scows for each scow being towed to the disposal area. The scow volume estimates are for use in connection with disposal area monitoring studies and are not intended to be used in determining quantities dredged. At the beginning of the work and as additional scows arrive on the project, sufficient time shall be allowed by the Contractor and assistance of Contractor personnel shall be made available by the Contractor for the purpose of obtaining the measurements of each scow under various partial and full load conditions. During the entire period of contract work, the Contractor shall provide and maintain sufficient spot or floodlights to permit the reading of the draft on the sides of scows at bow and stern from the tow boat at night and when visibility is impaired. The draft readings and each pocket/compartment measurement will be required for each scow towed to the disposal area and will be made by the disposal inspector. Measurements are to be taken and recorded prior to departure from the dredge site and upon arrival at the immediate disposal location. The Contractor shall ensure that adequate time is allowed by the tow boat captain for these readings to be obtained.

#### 3.2.4.1 Scow Pocket Doors

Due to the fine nature of the dredged material, the Contractor shall achieve proper closure and watertightness of pocket doors to eliminate seepage or leakage of material. The use of plastic material to cover cracks in scow pockets will not be allowed.

## 3.3 SHOALING

If, before the contract is completed, shoaling occurs in any section previously accepted, including shoaling in the finished channel because of the natural lowering of the side slopes, redredging at contract price, within the limits of available funds may be done if agreeable to both the Contractor and the Contracting Officer.

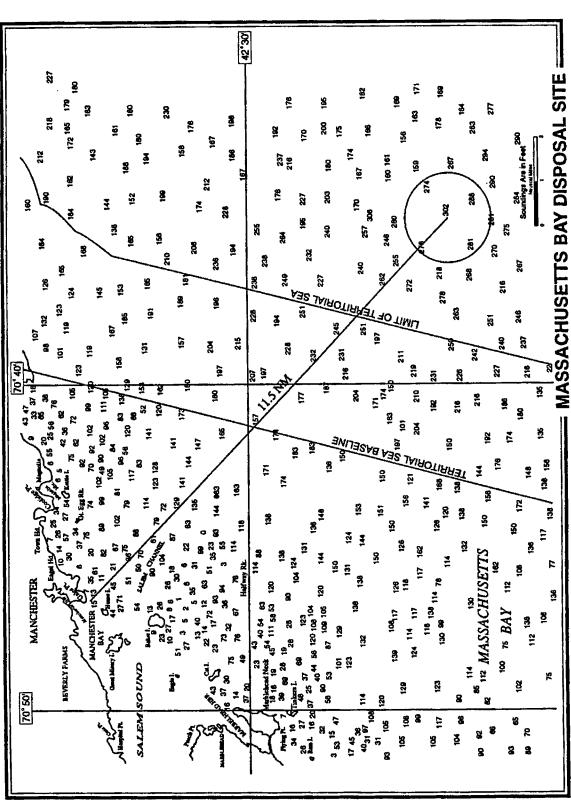
#### 3.4 FINAL CLEANUP

Final cleanup shall include the removal of all the Contractor's plant and equipment either for disposal or reuse. Plant, equipment, and materials to

be disposed of shall only be disposed in a manner and at locations approved by the Contracting Officer. Unless otherwise approved by the Contracting Officer, the Contractor will not be permitted to abandon any equipment in the disposal area or other areas adjacent to the worksite.

Failure to promptly remove all plant, equipment, and materials upon completion of the dredging will be considered a delay in the completion of the final cleanup and demobilization work. In such case, the Government will exercise its right to remove any plant, equipment, and materials at the Contractor's expense.

-- End of Section --



The authorized disposal point (within the overall disposal area) is specified for each dredging project in other project docu-Description: This site is a circular area with a diameter of 2 nautical miles and center at 42° 25.1'N, 70° 35.0'W. From the center, the Marblehead Tower bears true 295° at 24,916 yards and Bakers Island Horn bears true 308° at 23,237 yards. ments. Depth range: 272 to 302 feet MLW.

NOTE: The map depicts the disposal site's location in relation to landmarks. It is not intended for use in navigation.

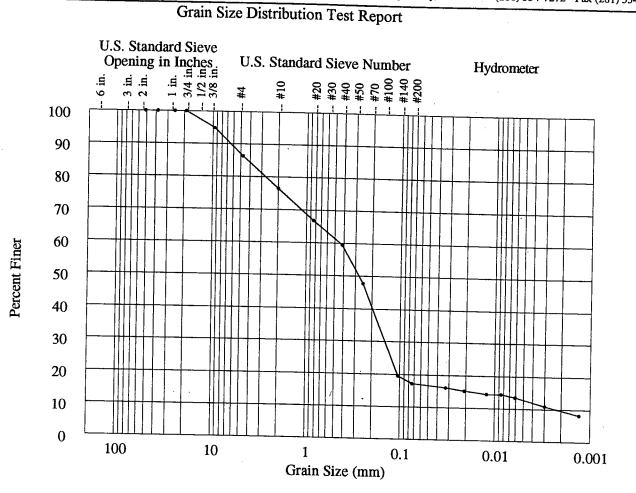
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TOTAL AI PREVIO			FT						NC		FECTIVE			E			
TOTAL ADVAN	ICE TO DATE		FT					HAN	IDLING PIPE LI	•			,				
FLOATING PIP	E	SHO	RE PIPE		SUBMERG	ED PIPE		HAN	IDLING ANCHO	OR LINE	S						
TOTAL	LENGTH OF DIS	CHARG	GE PIPE		FT			CLE	ARING PUMP	and Pif	PE LINES						
H.P. BOOS	TER ADDED @_	FT	TO DA					CLE	ARING CUTTE	R OR S	UCTION HE	AD					
	TER ADDED @_	FT						WAI	TING FOR SCO	OWS							
CUBIC YARDS	S REMOVED		GROSS		С	REDITED		TO A	AND FROM WH	IARF O	R ANCHORA	\GE					
AMOUNT DRE								CHA	NGING LOCAT	TION OF	PLANT ON	JOB					
AMOUNT PR								LOS	S DUE TO OPF	POSING	NATURAL	ELEMENT	S				
TOTAL AMOUN								SHO	RE LINE AND	SHORE	WORK						
TO D.								WAI	TING FOR BOO	OSTER							
PUMPING/CI								MING	OR OPERATIN	G REPA	AIRS (EXPLA	IN IN REM	MARKS)				
		OPE	RATING SUPPL	IES				WAI	TING FOR ATT	ENDEN	T PLANT						
COMMO	YTIDC		CONSUMED		С	REDITED		PRE	PARATION AN	ID MAKI	NG UP TOV	1					
ITEM	UNIT		QUANTITY		C	UANTITY		TRA	NSFERRING P	PLANT B	ETWEEN W	ORKS					
								LAY	TIME OFF SHI	FT AND	SATURDA	/S					
FUEL	BBL							-	IDAYS AND HO	DLIDAYS	3						
FLECTRICITY	1041							╂	INC OUT OF V	NAV 05	TDAFFIO					}	-
ELECTRICITY	KW							-	/ING OUT OF V			RKS)				1	
LUBRICANTS	GAL							╅—	AL NON-EFFE	•						1	
								-	. OF NON-EFF					1	%		
MOB DATE:		DRED	GE START:		DEMOB DA	TE:			TAL EFFEC			N-EFFE	CTIVE T	IME			

		QUALITY C	ONTROL RE	PORT-PIPELINE	DREDGE		
CONTRACT NO.	CONTRACT TITLE	С	ONTRACTOR		DATE	REPORT NO.	
	ATTENDANT PLANT						
ITEM	NAME OR NUMBER	H.P.	HOURS		LOST TIME		
				(NC	ORK)		
				MAJOR REPAIRS AI	ND ALTERATIONS		
				CESSATION			
				COLLISIONS			
				MISCELLANEOUS			
				TOTAL LOST TIME			
				PERCENTAGE OF T	OTAL TIME	%	
				TOTAL TIME IN	I PERIOD		
			1	-			
		1	†	1			
NARRATIVES				11			<u> </u>

					QUALI	TY CONTRO	L REF	ORT-HO	PPER	DREDGE					
CONTRACT NO		CON	NTRACT TIT	LE						CONTRACTOR	2	DATE		REF	PORT NO.
CHARACTER O	F WORK		MAIN	ITENANC		NEW WORK								<u> </u>	
DDED	.05	HOF	PPER CAP:_		CY		AVG \	OL OF BIN	WATER:		CY	AVG UNFILI	LED CAP:		CY
DRED	GE		NO. OF CF MEMBEI		DREDGE	<u> </u>	OTHE	R PLANT		WORK SC		SHIFTS PE	R DAY	DAY	YS PER WEEK
LOCAT			LOCATION	CHANNE	-	REACH DRED		D	SPOSAL	AREA USE	QT	Y DEPOSITE GROSS (cy)	D		LATIVE AND QTY OSIT FOR DA (CY)
OF WOI						314 10 31						GROSS (Cy)		DEFC	OSIT FOR DA (CT)
		AVG	G LENGTH C	F CUT		FT	AVG V	VIDTH OF (	CUT		FT	AVG DIST T	O DUMP		NM
CHARACT	ER OF	DEN	NSITY OF M	ATERIALS	1					GMS/LITER_					
MATER	RIAL	DEN	NSITY OF W	ATER						GMS/LITER@			°F		
RIVER/		MIN			TIME		MAX			TIME		GAGE LOCA	ATION		
STAC	3E	MIN			TIME		MAX			TIME		GAGE DATI	UM		
WEATHER CON	IDITION			WEAT	HER				MIN TE	MP		VISIBILITY		WIN	ND.
									MAX TI	EMP		1			
			DRAFT	•						DISTRIB	UTION O	F TIME AN	ID MILES	RUN	
FORWARD	LIGHT			LOA	NDED						AGIT. (MIN)	ATING	DREDGE (MIN)	&HAUL	MILES RUN (NAUT MI)
								EFFECTI	VE WORI	KING TIME	<u> </u>				
AFT								PUMPING	<b>:</b>						
DRAG DEPTH	MAX		MII	ν				TURNING	):						
INDICATORS LAST O	CHECKED ON							TO DUMF	<b>:</b>						
AVERAGE SPEED C	F DREDGE D	URING LOA	ADING			FT/MIN		DUMPING	<b>3</b> :						
AVERAGE SPEED O	F DREDGE DU	JRING AGI	TATING			FT/MIN		TO CUT:							
GALLONS OF FUEL (		-D				GAL		TOTALS	EOTIVE :	MODICINO TIME					
GALLONS OF FUEL	JIL CONSUME	<u>-</u>				GAL				AND SUPPLIES			T		
GALLONS OF WATE	R CONSUMED	)				GAL				HARF OR	,,				
		WORK	PERFO	RMED		•		ANCHOR		T. IDAL EL EMEN	ITO.				
		DREDG	ING AND H	AULING						TURAL ELEMEN	NIS:				
NO. OF LOADS	TOTAL CYS	3	DISPOSA	_ AREA	TOTAL	CYS		BRIDGES	S:	AFFIC AND					
										IG REPAIRS			<u> </u>		
										BETWEEN WOF	RKS:		<u> </u>		
								LAY TIME					ļ		
		ATTEN	NDANT P	LANT				FIRE AND	BOAT E	KILLS:					
NAME OF PLA	ANT		TYPE			HOURS		MISCELL	ANEOUS						
								TOTALS							
								LOST TIM	1E						_
								MAJOR F		AND					
								CESSATI	ON:						
								COLLISIO	NS:						
								TOTALS;							
								TOTAL T	IME/MILE	s					

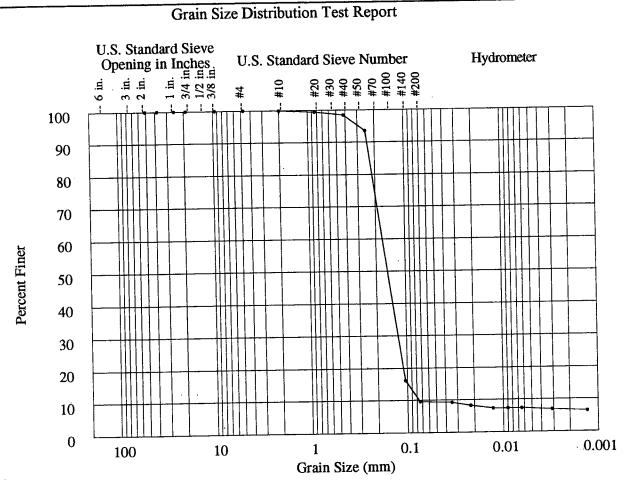
		QUALITY CONTROL RI	EPORT-HOPPER DREDGE		
CONTRACT NO.	CONTRACT TITLE		CONTRACTOR	DATE	REPORT NO.
NARRATIVES:	1		l		·





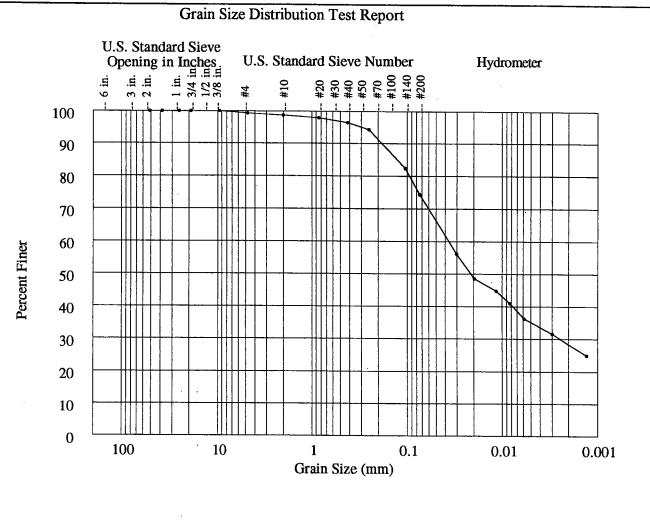
0	-		<u>%</u> 9	Sand				%	Fines	
% Cobble >3"	% Gravel <3" - #4	Coarse #6-#10	1	dium -#40		ine #200	1	Silt .005 mm	%(	Clay 05 mm
0.00	13.65	9.90	16	.94		.30		71		.50
Nat. Water (%)	LL	PI	D85	D60	Dea	Dag	T ====			
60.98			D03	100	D50	D30	D15	D10	Cc	Cu
Black Clayey Sand	with Gravel									CS SM
ISACE Nov. Engl		roject Description	on				Client P/N	J:	G339628	
JSACE-New Engl		M Projects					AMS P/N	:	9903-11	
Weymouth Fore Ri	ver						Client ID:		FR-A	<del></del>
							AMS ID:		4036	
						i	Date:		5/17/99	





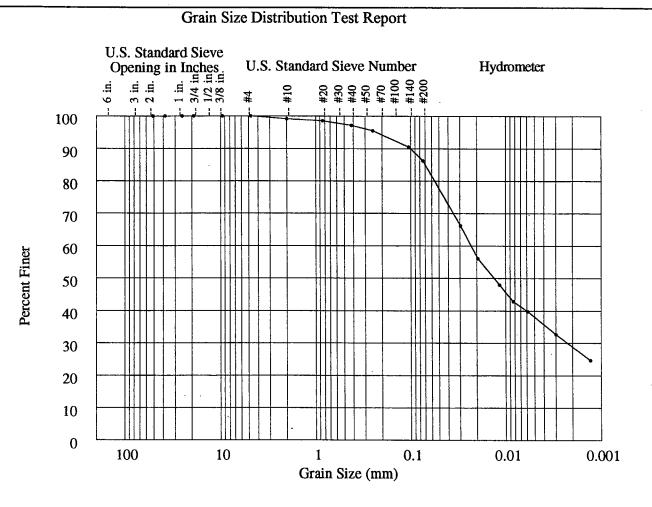
			% S	and			i	% F	ines		
% Cobble >3"	>3" <3" - #4 #6-#10 #16-#40 #50-#200 0.074-0.005 mm										
0.00	0.00	0.12	1.	40	88.	.91	2.3	26	7.30		
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Сс	Cu	
25.55			0.23	0.17	0.15	0.12	0.10	0.08	1.10	2.21	
Olive Gray-Dark	Greenish Gray, P		al Descrip						<del> </del>	-SC	
	]	Project Descript	ion				Client P/	N:	G339628		
USACE-New Eng	gland District, Od	&M Projects		_			AMS P/N	I:	9903-11		
Weymouth Fore I	_						Client ID	:	FR-B		
•							AMS ID:		4034		
							Date:		5/17/99		





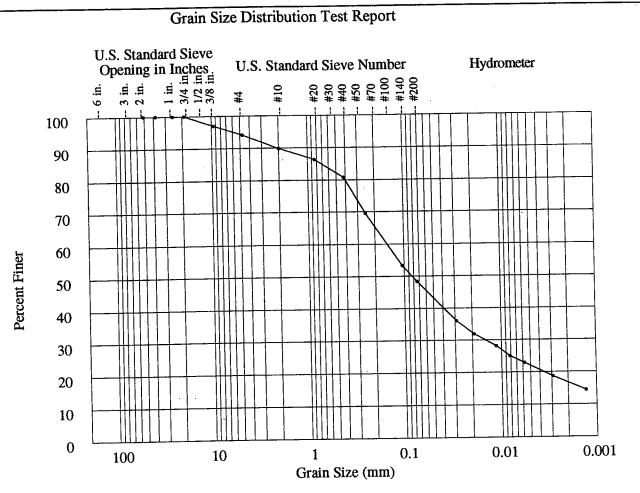
			% S	Sand				%1	ines	
% Cobble >3"	% Gravel <3" - #4	Coarse #6-#10		dium -#40		ne #200	1	Silt .005 mm	% Clay <0.005 mr	
0.00	0.69	0.63	2.	19	22	.11	39	.68	34	.70
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
91.63		-								
			al Descript	ion					US	SCS
Grayish Black San	ndy Organic Clay	ey Silt							OL	/OH
		roject Descripti	on				Client P/1	<b>V</b> :	G339628	
USACE-New Eng	land District, O&	M Projects				_	AMS P/N	:	9903-11	
Weymouth Fore R	iver						Client ID		FR-C	
							AMS ID:		4035	
							Date:		5/17/99	





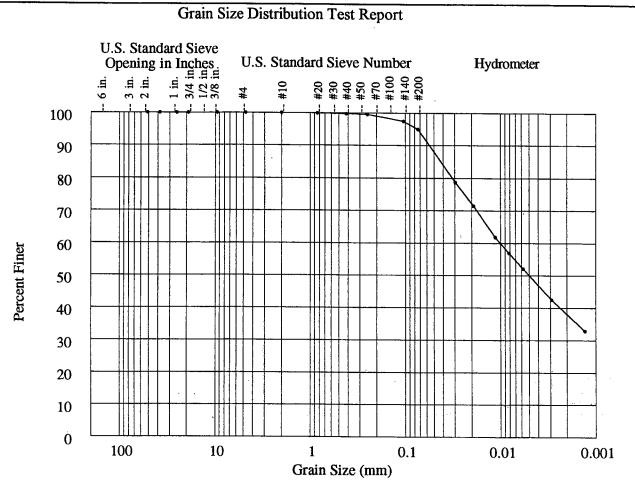
			% S	and				<b>%</b> ]	Fines	
% Cobble	% Gravel	Coarse	Med	lium	Fi	ne	%	Silt	% Clay	
>3"	<3" - #4	#6-#10	#16	<del>-#4</del> 0	#50-	#200	0.074-0	.005 mm	<0.00	5 mm
0.00	0.00	0.86	1.	95	10	.92	48	.36	37	.90
-									_	•
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
90.82										
		Materia	al Descript	ion					US	CS
Dark Gray Organi	c Clayey Silt								OL	/OH
	F	roject Descripti	on				Client P/I	N:	G339628	
USACE-New Eng	land District, O&	M Projects					AMS P/N	Ι:	9903-11	
Weymouth Fore R	liver						Client ID	:	FR-D	
							AMS ID:		4037	
							Date:		5/17/99	





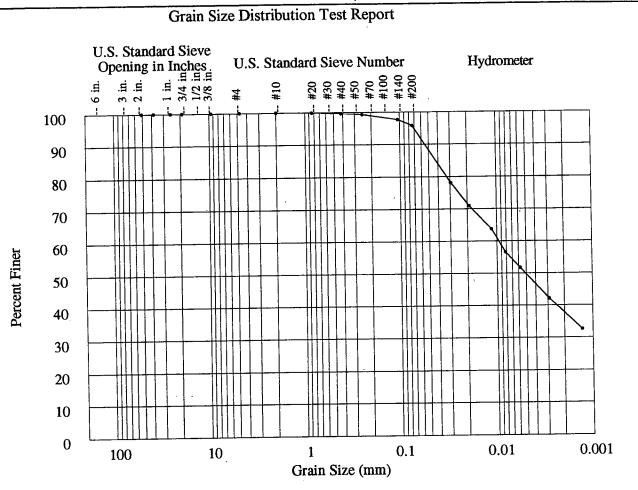
			% S	and				% F	ines	
% Cobble >3"	% Gravel	Coarse #6-#10	Med	lium -#40		ne #200		Silt 005 mm	% C <0.00	•
0,00	5.93	4.24	8.	98	32	.50	26	.45	21.	90
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Сс	Cu
69.58			·							
·		Materi	al Descrip	tion		<del></del> -			US	CS
Grayish Black Sil	ty, Clayey Fine S	and							SC-	-SM
<u></u>		Project Descript	ion				Client P/	N:	G339628	
USACE-New Eng							AMS P/N	J:	9903-11	
Weymouth Fore I	-	-					Client ID	);	FR-E	
							AMS ID		4038	
							Date:		5/17/99	





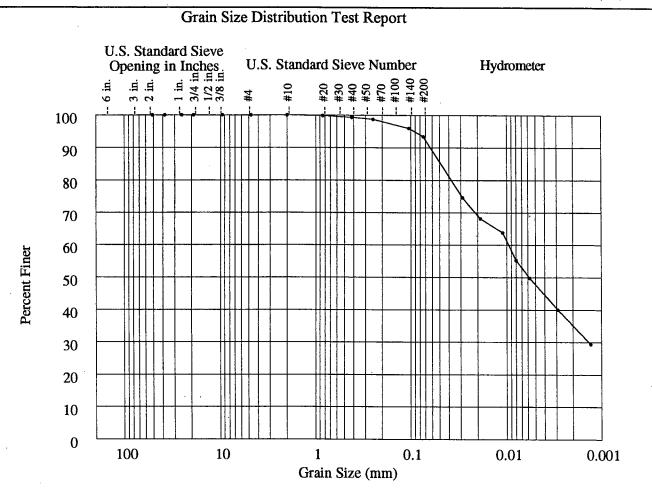
			% S	and	:			%]	Fines	
% Cobble	% Gravel	Coarse	Med	lium	Fi	ne	%	Silt	% Clay	
>3"	<3" - #4	#6-#10	#16-	<del>-#4</del> 0	#50-	#200	0.074-0	.005 mm	<0.00	5 mm
0.00	0.00	0.00	0.	26	4.	72	44	.77	50	.25
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	, , , , , , , , , , , , , , , , , , ,	,
132.08	DL		D63	D00	D30	טטע	D15	D10	Сс	Cu
	···	3.6-4	10		_	-			<u> </u>	
0 112110		Materia	al Descript	10N					US	CS
Grayish Black Org	ganic Silty Clay								OL	/OH
		roject Descripti	on		·		Client P/N	V:	G339628	
USACE-New Engl		M Projects				-	AMS P/N	[:	9903-11	
Weymouth Fore R	iver						Client ID	:	FR-F	
							AMS ID:		4039	
							Date:		5/17/99	





			% S	and				% F	ines		
% Cobble >3"	% Gravel <3" - #4	Coarse #6-#10		lium -#40	Fi: #50-	ne #200	0.074-0.	Silt 005 mm	<0.00	Clay 5 mm	
0.00	0.00	0.00	0.	36	3.	83	46	.06	49.75		
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Сс	Cu	
146.74							<u> </u>		<u> </u>	<u> </u>	
<u></u>		Materi	al Descript	tion					US	SCS	
Grayish Black Org	ganic Silty Clay								OL	OH ·	
		Project Descript	ion				Client P/I	N:	G339628		
USACE-New Eng							AMS P/N	ī:	9903-11		
Weymouth Fore F	='	3					Client ID	:	FR-G		
	_,						AMS ID:		4040		
							Date:		5/17/99		





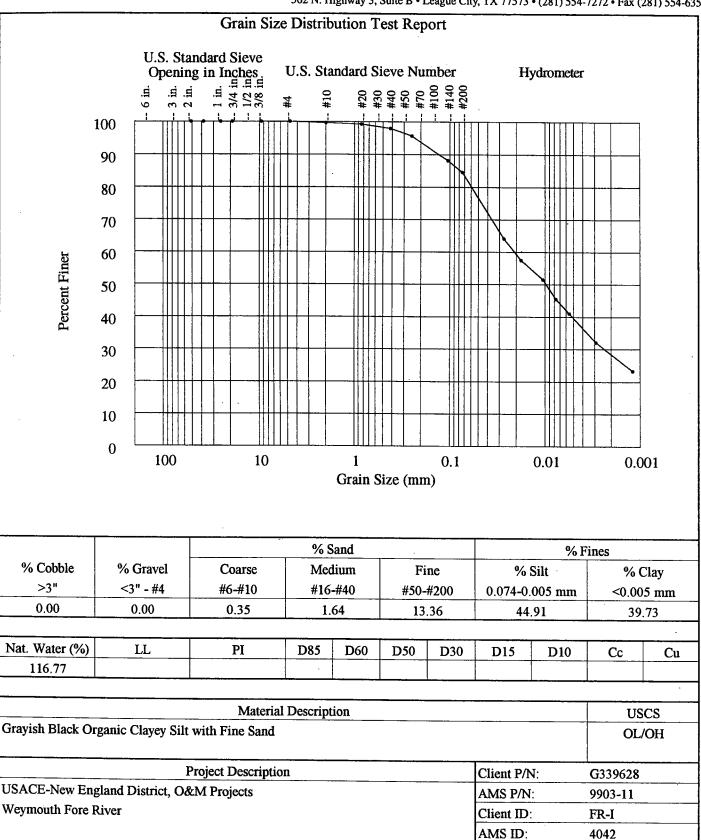
		% Sand % F						ines		
% Cobble	% Gravel	Coarse	Medium		Fine		% Silt		% Clay	
>3"	<3" - #4	#6-#10	#16-#40		#50-#200		0.074-0.005 mm		<0.005 mm	
0.00	0.00	0.04	0.64 5.87		45.49		47.95			
Nat. Water (%)	LL ·	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
124.32										
					·					
		Materi	al Descript	tion					US	CS
Grayish Black Org	ganic Silty Clay								OL	OH
		roject Descripti	ion				Client P/I		G339628	
USACE-New England District, O&M Projects  AMS P/N:										
	•	AVI I TOJCCIS							9903-11	
Weymouth Fore R	iver						Client ID	:	FR-H	
							AMS ID:		4041	
							Date:		5/17/99	



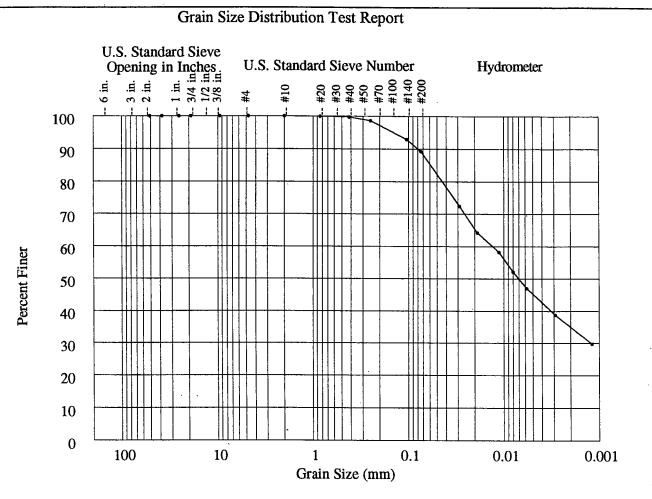
502 N. Highway 3, Suite B • League City, TX 77573 • (281) 554-7272 • Fax (281) 554-6356

Date:

5/17/99

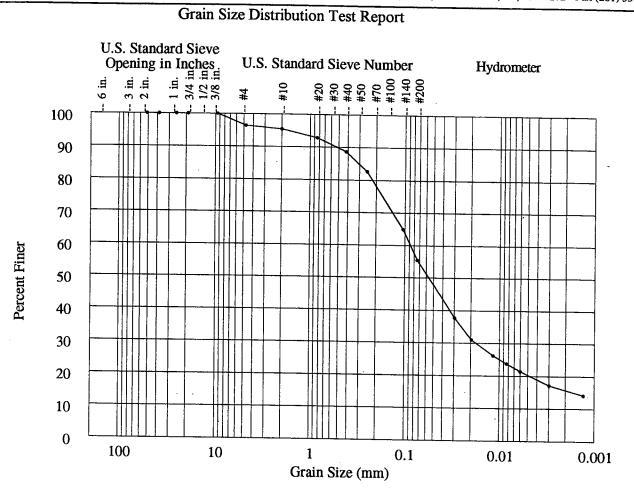






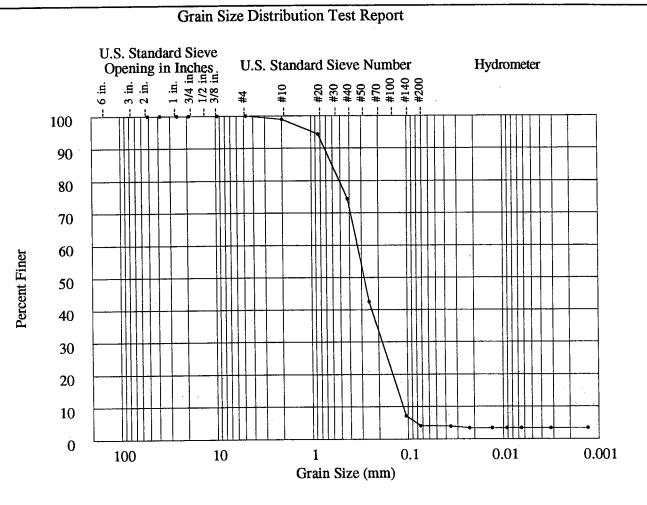
		% Sand					% Fines			
% Cobble	% Gravel	Coarse	Medium		Fine		% Silt		% Clay	
>3"	<3" - #4	#6-#10	#16-#40		#50-#200		0.074-0.005 mm		<0.005 mm	
0.00	0.00	0.04	0.26 10		10.37 44.13		.13	45.20		
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	C-	<u> </u>
127.20	LL	F1	D63	_ D00	1030	טנע	D15	D10	Cc	Cu
					·					
		Materi	al Descript	tion					US	CS
Grayish Black Org	ganic Silty Clay								OL	OH
	F	roject Descripti	ion		<del></del>		Client P/1	N:	G339628	
USACE-New England District, O&M Projects  AMS P/N:								9903-11		
Weymouth Fore River Client ID:						:	FR-J			
							AMS ID:	_	4043	-
							Date:		5/17/99	





			% Fines							
% Cobble >3"	% Gravel <3" - #4	Coarse #6-#10	Medium #16-#40		Fine #50-#200		% Silt 0.074-0.005 mm		% Clay <0.005 mm	
0.00	3.61	0.97	6.75 33.18		34.94		20.55			
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
50.31		· <del></del>		<u> </u>						
		Materia	ıl Descript	ion					IIS	CS
Grayish Black Sandy Organic Clayey Silt							OL/OH			
		roject Description	on				Client P/N	<b>V</b> :	G339628	
USACE-New England District, O&M Projects  AMS P/N:								9903-11		
Weymouth Fore Ri	iver						Client ID		FR-K Silt	Layer #1
							AMS ID:		4044 (A)	
							Date:		5/17/99	

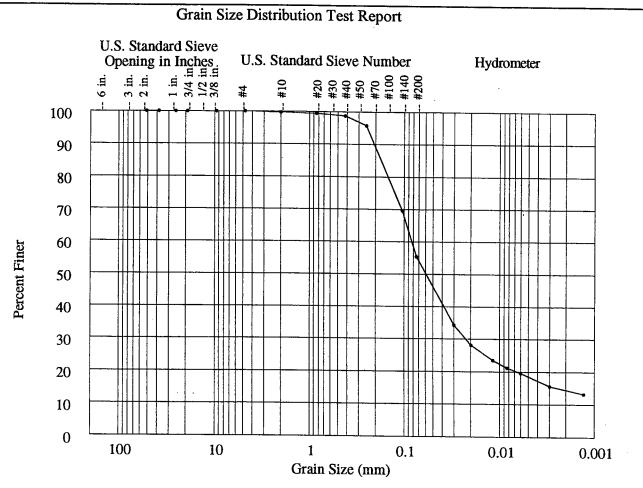




		% Sand					% Fines			
% Cobble >3"	% Gravel <3" - #4	Coarse #6-#10	#16-#40 #5		Fine #50-#200		% Silt 0.074-0.005 mm		% Clay <0.005 mm	
0.00	0.00	1.09			70	70.28 0.69		69	3.43	
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Сс	Cu
13.24			0.59	0.32	0.28	0.18	0.12	0.11	0.92	2.91

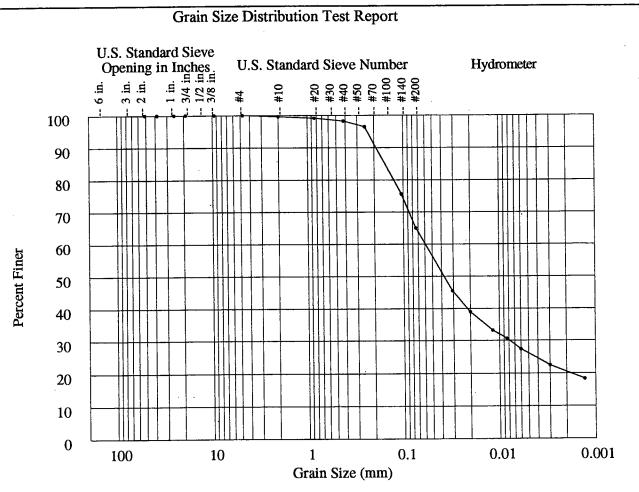
Material Description	USCS	
Moderate Yellowish Brown Fine Sand	SP	
Project Description	Client P/N:	G339628
USACE-New England District, O&M Projects	AMS P/N:	9903-11
Weymouth Fore River	Client ID:	FR-K Sand Layer #2
	AMS ID:	4044 (B)
	Date:	5/17/99





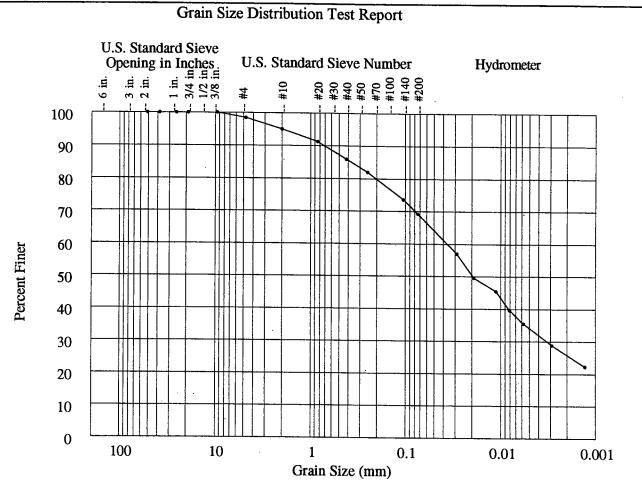
<u> </u>		<u>.</u>	-								
			% S	Sand			% Fines				
% Cobble >3"	% Gravel Coarse <3" - #4 #6-#10			lium -#40	1	ne #200		Silt .005 mm	l .	Clay 5 mm	
0.00	0.00	0.00 0.21 1.07 43.37		.37	36.85		18.50				
Nat. Water (%)	LL	PI	D85	Den	D50	Dao			1 _	·	
51.94	LL	11	D03	D60	D50	D30	D15	D10	Сс	Cu	
	·	36	15								
Grayish Black San	dy Organic Clay		al Descript	10 <b>n</b>					<del> </del>	CS OH	
· <del></del>					_					OH	
		roject Descripti	on				Client P/N	٧:	G339628		
USACE-New Eng	land District, O&	M Projects					AMS P/N	:	9903-11	,	
Weymouth Fore R	iver						Client ID		FR-L		
							AMS ID:		4045		
							Date:		5/17/99		





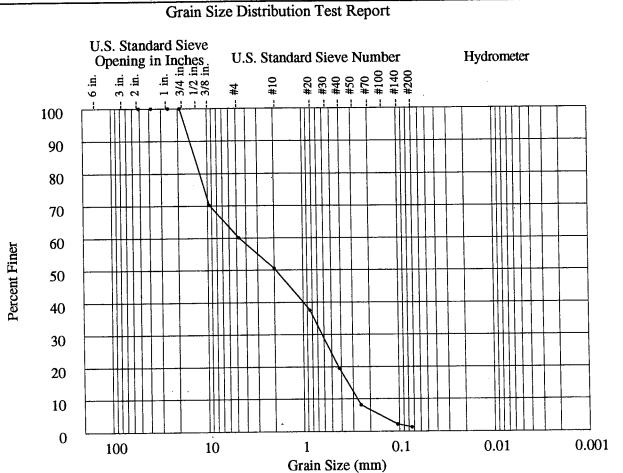
	% Sand %								Fines	
% Cobble >3"	% Gravel	Coarse #6-#10							% C <0.00	Clay 5 mm
0.00	0.00	0.38			38.94		26.05			
Nat. Water (%)	LL	PI	D85 D60		D50	D50 D30	D15	D10	Cc	Cu
76.42										
· · · · · · · · · · · · · · · · · · ·		Materi	al Descript	tion					US	SCS
Grayish Black Sar	ndy Organic Clay	ey Silt							OL	/OH
		Project Descript	ion				Client P/	N:	G339628	
USACE-New Eng	USACE-New England District, O&M Projects						AMS P/N	J:	9903-11	
Weymouth Fore River							Client ID:		FR-M	
							AMS ID:		4046	
							Date:		5/17/99	





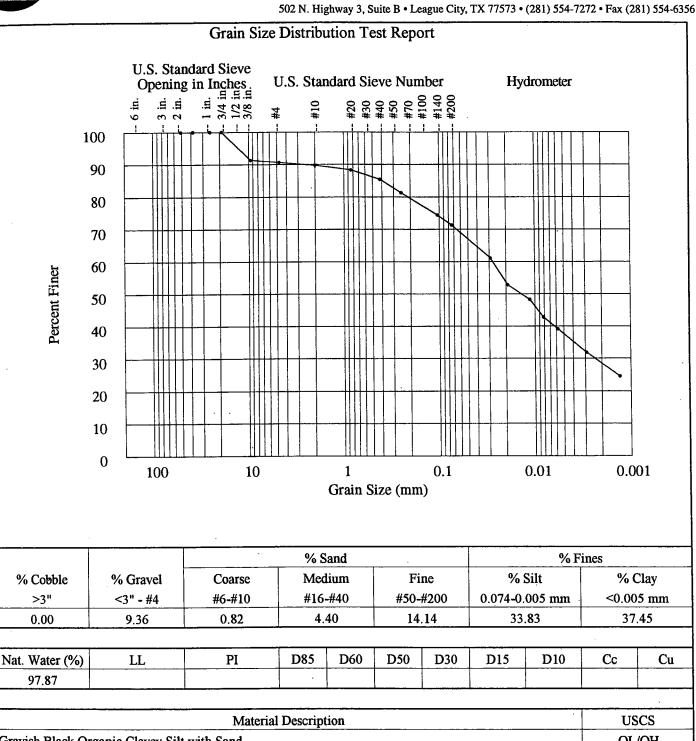
			<u>%</u> \$		% F	ines				
% Cobble >3"	% Gravel <3" - #4	Coarse #6-#10		lium -#40		ne #200		Silt .005 mm	!	Clay 5 mm
0.00	1.56	3.42	9.09 16.67		<del> </del>	.01	34.25			
Nat. Water (%)	LL	PI	PI D85 D60 D50 D30 D15 D10					D10	Cc	Cu
93.95			1			<b>D</b> 50	DIS	Dio	- 4	Cu
Grayish Black Org	ganic Clayey Silt		al Descript	1011						CS OH
		roject Descripti	on				Client P/N	V:	G339628	
	USACE-New England District, O&M Projects  AN								9903-11	
Weymouth Fore River						Client ID		FR-N		
							AMS ID:		4047	
Date:						Date: 5/17/99				





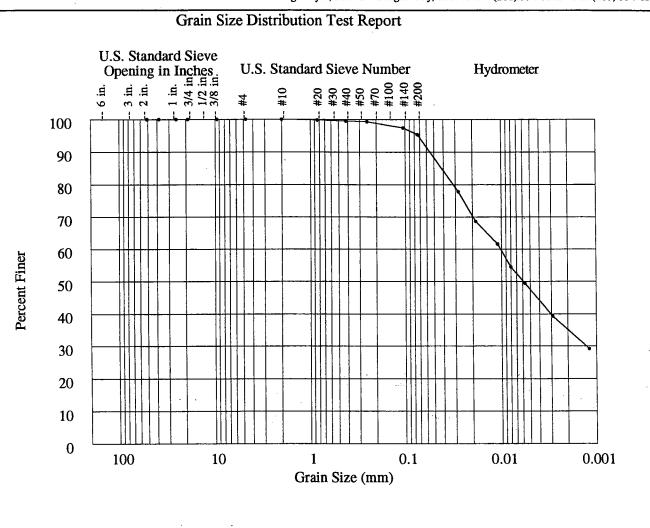
			% S	and				% I	ines	
% Cobble >3"	% Gravel <3" - #4	Coarse #6-#10			% 5 0.074-0.	Silt 005 mm		Clay 5 mm		
0.00	39.93	9.54	31.01		18.15		0.	00	1.37	
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
15.40			13.27	4.39	1.79	0.62	0.33	0.27	0.32	16.26
			al Descript						USCS	
Moderate Yellowi	sh Brown Well-C	Graded Medium	Sand with	Gravel					1	SP
	]	Project Descript	ion				Client P/1	N:	G339628	
USACE-New England District, O&M Projects						AMS P/N:				
Weymouth Fore River					Client ID:		:	FR-O		
							AMS ID:		4048	
Date:								Date: 5/17/99		





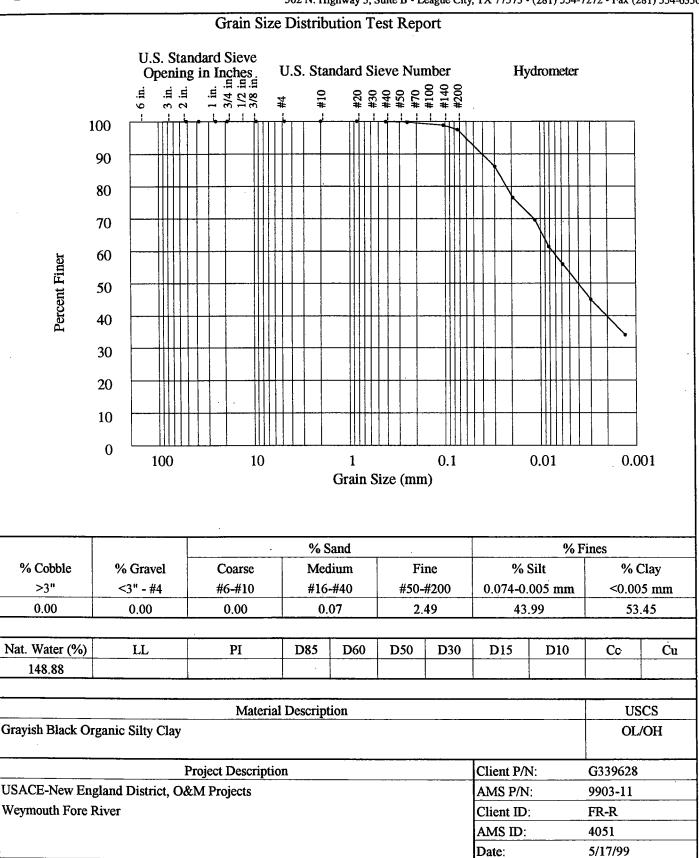
Grayish Black Organic Clayey Silt with Sand		OL/OH
Project Description	Client P/N:	G339628
USACE-New England District, O&M Projects	AMS P/N:	9903-11
Weymouth Fore River	Client ID:	FR-P
	AMS ID:	4049
	Date:	5/17/99



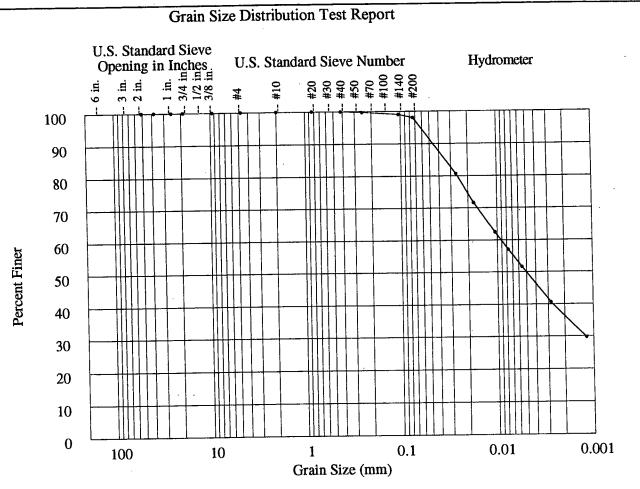


			% S	and				% F	ines	
% Cobble	% Gravel	Coarse	Med	lium	Fi	ne	%	Silt	% Cla	
>3"	<3" - #4	#6-#10	#16	-#40	#50-	#200	0.074-0.	005 mm	nm <0.005 m	
0.00	0.00	0.04	0.04 0.38 4.18		48.40		47.00			
										•
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
137.86										
* tu*		. <u> </u>	- ·							
· · · · · · · · · · · · · · · · · · ·	<del></del>	Materi	al Descript	ion					US	SCS
Grayish Black Org	ganic Clayey Silt								OL	/OH
									<u> </u>	
	F	Project Descripti	ion				Client P/I	N:	G339628	
USACE-New Eng	land District, O&	M Projects					AMS P/N	Ī:	9903-11	,
Weymouth Fore R	tiver						Client ID	:	FR-Q	
							AMS ID:		4050	
							Date:		5/17/99	



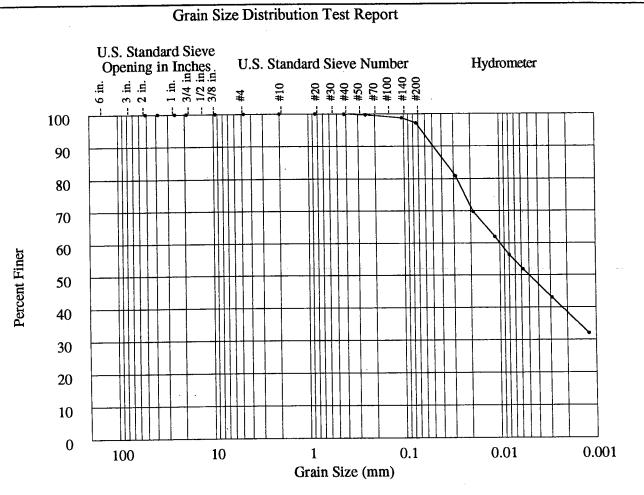






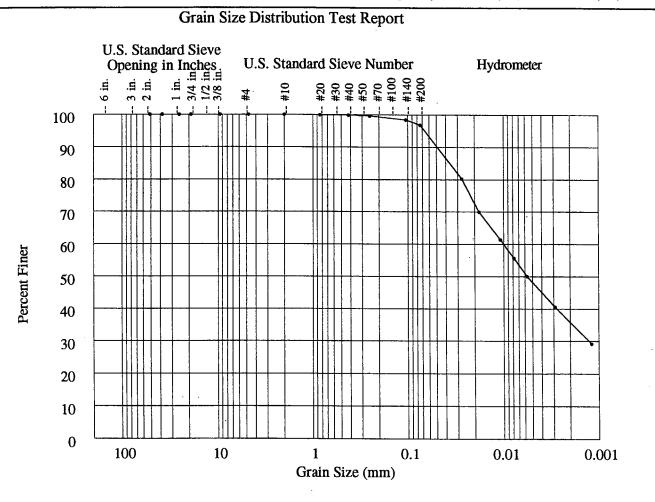
			% S	and				% F	ines	
% Cobble >3"	% Gravel <3" - #4	Coarse #6-#10	0 #16-#40 #5			ne #200	% S 0.074-0.	Silt 005 mm	ľ	
0.00	0.00	0.02	0.10		1.	87	48	.21	49.80	
	(a) LL PI D85 D60 D50 D30 D					D15	D10	Cc	Cu	
Nat. Water (%)	LL	P1	D83	שטע	D30	D30	D13	DIO		
136.27				<u> </u>	l	<u>.                                    </u>		<u> </u>	<del></del>	
·		Materi	al Descrip	tion					US	CS
Grayish Black Or	ganic Silty Clay								OL	/OH
	]	Project Descript	ion			<del></del>	Client P/	N:	G339628	
USACE-New Eng		<del></del>					AMS P/N	1:	9903-11	
Weymouth Fore River						Client ID:			FR-S	
							AMS ID:		4052	
							Date:		5/17/99	





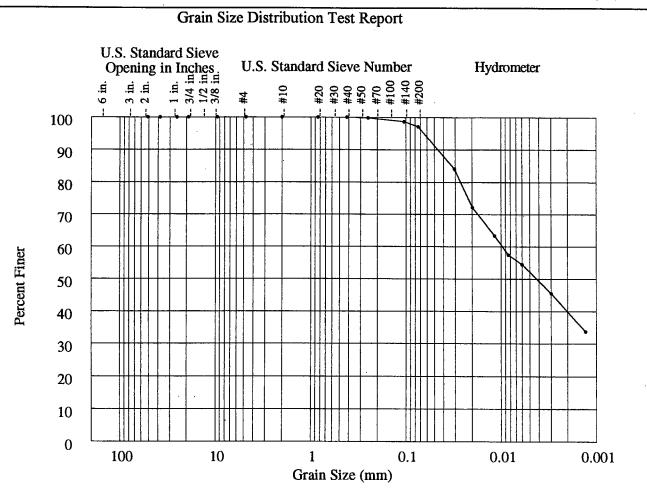
		-	% S	and				% F	ines	
% Cobble >3"	% Gravel <3" - #4	Coarse #6-#10		lium -#40		ne #200		Silt 005 mm	% Clay <0.005 m	
0.00	0.00	0.00	0 0.10 2.70		47.40		49.80			
			705	D.60	D50	Dag	D16	D10		
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
143.92										
									1	·
		Materi	al Descript	ion					US	CS
Grayish Black Or	ganic Silty Clay								OL	/OH
		Project Descript	ion				Client P/	N:	G339628	
USACE-New Eng	gland District, Od	M Projects					AMS P/N	<b>I</b> :	9903-11	
Weymouth Fore F	=	-					Client ID	:	FR-T	
•							AMS ID:	_	4053	
							Date:		5/17/99	





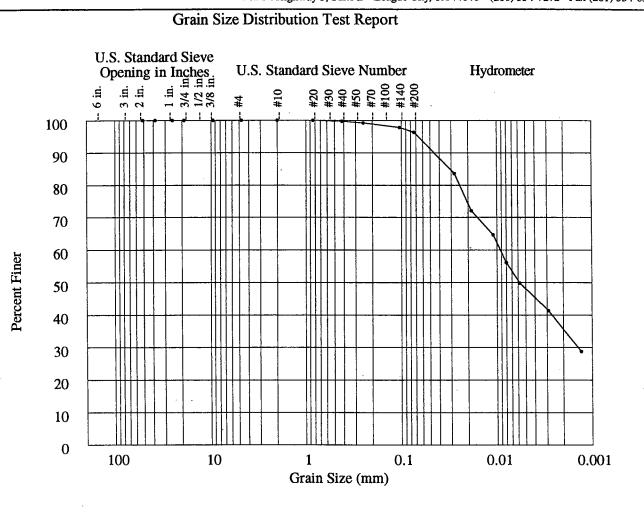
			% S	Sand				<b>%</b> J	Fines	
% Cobble	% Gravel	Coarse	Med	lium	Fi	ne	%	Silt	% (	Clay
>3"	<3" - #4	#6-#10	#16	<del>-</del> #40	#50-	#200	0.074-0.	0.074-0.005 mm		5 mm
0.00	0.00	0.00	0.00 0.13 3.06		48	48.86		.95		
	<u> </u>	······································								
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Сс	Cu
143.72										
		Materi	al Descript	tion					US	CS
Grayish Black Org	ganic Clayey Silt								OL,	/OH
	F	Project Descripti	ion				Client P/N	N:	G339628	
USACE-New Eng	land District, O&	kM Projects					AMS P/N	[:	9903-11	
Weymouth Fore River						Client ID		FR-U		
							AMS ID:		4054	
							Date:		5/17/99	





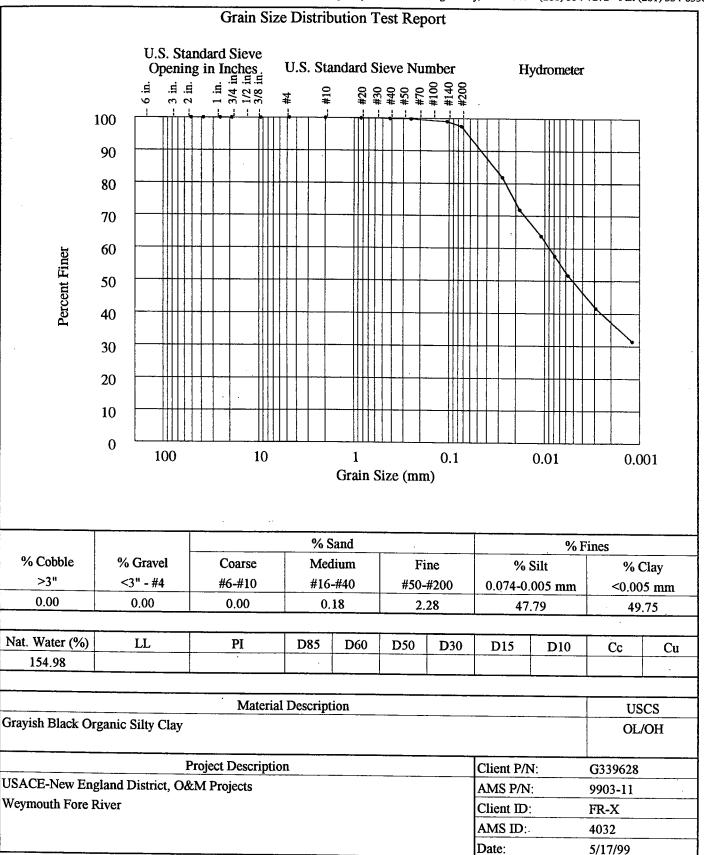
			% S	Sand				%	Fines	
% Cobble >3"	% Gravel <3" - #4	Coarse #6-#10	- 1	lium -#40		ne #200		Silt .005 mm	ì	Clay 05 mm
0.00	0.00	0.00	0.00 0.04 2.75		45	45.16		.05		
N. W. O.			<del></del>	T			<del>                                     </del>	1	· · ·	·
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
132.86										
		Materia	al Descript	ion					US	CS
Grayish Black Org	ganic Silty Clay								OL	/OH
	P	roject Descripti	on				Client P/	<b>N</b> :	G339628	<del></del>
USACE-New Eng	land District, O&	M Projects			_		AMS P/N	[:	9903-11	
Weymouth Fore River							Client ID	•	FR-V	
							AMS ID:		4055	
							Date:		5/17/99	





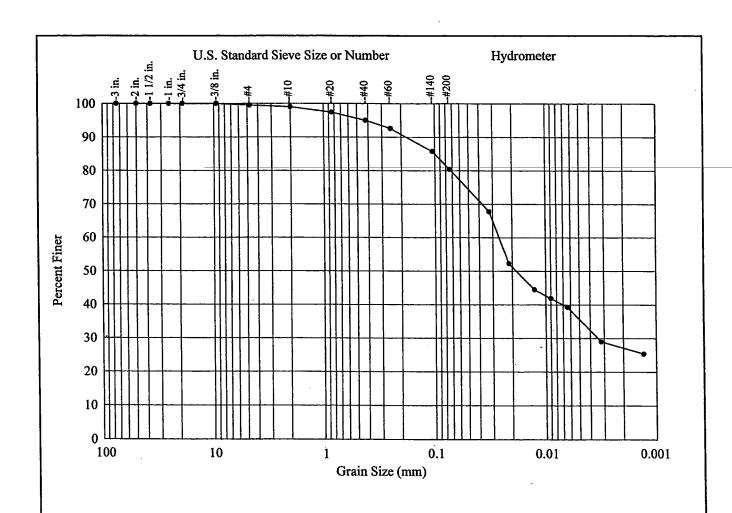
	% Sand %								Fines	
% Cobble	% Gravel	Coarse	Med	dium	Fi	ne	%	Silt	% (	Clay
>3"	<3" - #4	#6-#10	#16	<del>-</del> #40	#50-	#200	0.074-0.	005 mm	<0.00	5 mm
0.00	0.00	0.00	0.30 3.26		48.48		47.95			
Nat. Water (%)	LL	PI	D85	D60	D50	D30	D15	D10	Cc	Cu
158.43			1		200			210		- Ou
		Materi	al Descript	tion					US	CS
Grayish Black Org	ganic Clayey Silt								OL	/OH
	F	Project Descripti	ion		·		Client P/N	<b>V</b> :	G339628	
USACE-New Eng	land District, O&	M Projects					AMS P/N	[:	9903-11	•
Weymouth Fore R	iver						Client ID	:	FR-W	
							AMS ID:		4033	
							Date:		5/17/99	







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ASTM D	122 (P	article Ci	za Anal	ucia Af	College
A311011	4// IP	arncie-Si	ze anar	veie m	Source

Boston Harbor/Weymouth Fore River

		% Sand							nes	s	
% Cobble >3"	% Gravel <3" - #4	Coa #1	arse 10	Medium #20-#40		Fine #60-#200		Silt 0.074-0.005 mm		Clay <0.005 mm	
0.00	0.46	0.51 4.02		14	.61	44.40		36.00			
Water Cont. (%)	Tot. Solids (%)	LL	PL	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	C <sub>c</sub>	$C_{u}$
90	53										
		N	laterial I	Description	on					USCS	
Very Soft Grayis	h-Black Elastic Sil	t With F	ine-Grai	ned Sand	l					M	Н
	Projec	t Descri	iption				Client I	P/N:	G339656	-0001	
USACE-New England District							AMS P/N: 2001-03-01			01	

Battelle ID:

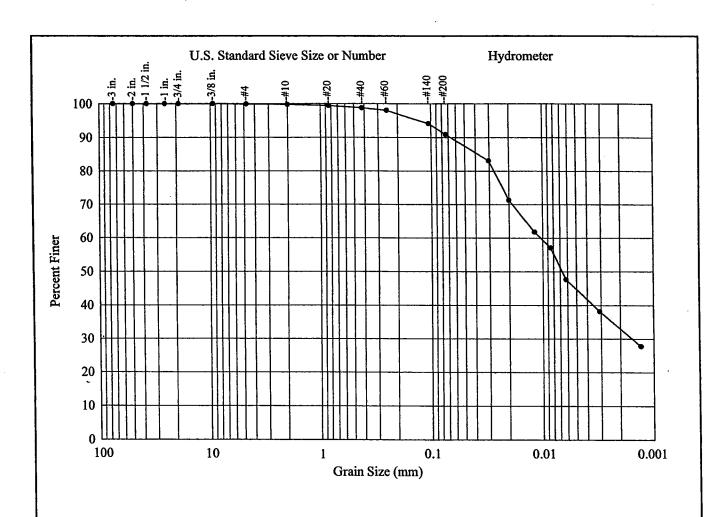
AMS ID:

Date:

FR-CDE122700-GS

8347 1/26/01





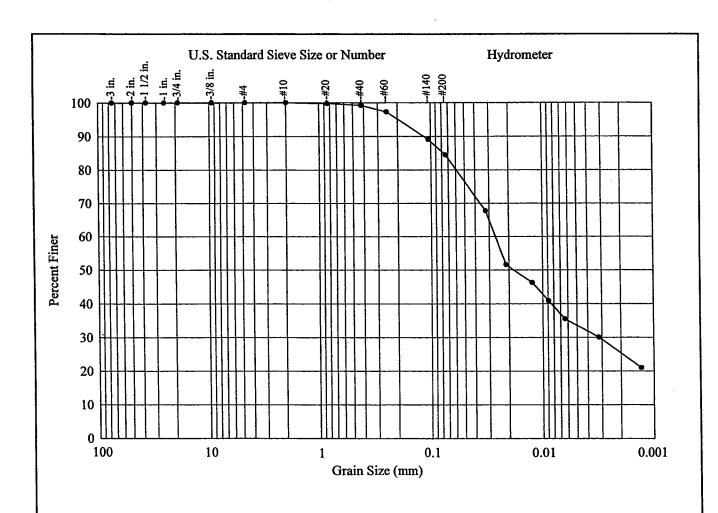
ASTM D422	(Particle-Size	Analysis	(elin2 an
AND LIVE DITAL V		ALIGI V DIO	or porrer

	Į_	% Sand							% Fines			
% Cobble	% Gravel	Coarse		Coarse Mediu		n Fir		Silt		Clay		
>3"	<3" - #4	#10		#20-#40		#60-#200		0.074-0.005 mm		<0.005 mm		
0.00	0.07	0.	14	0.	95	7.	95	45	.90	45.	.00	
Water Cont. (%)	Tot. Solids (%)	LL	PL	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	$C_c$	$C_{\mathbf{u}}$	
125	44											
		N	/laterial I	Descriptio	on					USCS		
Very Soft Grayisl	h-Black Elastic Sil	t								M	Н	
	Projec	ct Descr	iption				Client 1	P/N:	G339656	-0001		

Project Description	Client P/N:	G339656-0001
USACE-New England District	AMS P/N:	2001-03-01
Boston Harbor/Weymouth Fore River	Battelle ID:	FR-FGHI122800-GS
	AMS ID:	8350
	Date:	1/26/01



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		% Sand							% Fi	ines		
% Cobble >3"	% Gravel <3" - #4	Coarse #10				Fine #60-#200		Silt 0.074-0.005 mm		Clay <0.005 mm		
0.00	0.00	0.00 0.81		14	.67	50.52		34.00				
Water Cont. (%)	Tot. Solids (%)	LL	PL	D <sub>85</sub>	$D_{60}$	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	C <sub>c</sub>	$C_{u}$	
104	49											
		N	laterial I	Descriptio	n					US	CS	
Very Soft Grayisl	h-Black Elastic Sil	t With F	ine-Grai	ned Sand						M	IH	
	Projec	ct Descri	iption				Client F	?/N:	G339656	5-0001		
USACE-New En	gland District						AMS P	/N:	2001-03-	01		
Boston Harbor/W	eymouth Fore Riv	er					Battelle	ID:	FR-JK12	2600-G	S	

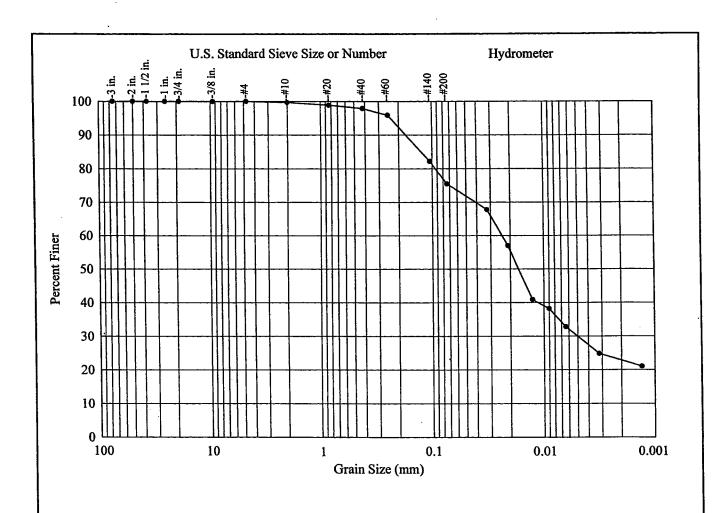
AMS ID:

Date:

8346 1/26/01



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ASTM D422 (Part	le-Size Ana	lysis of Soils)
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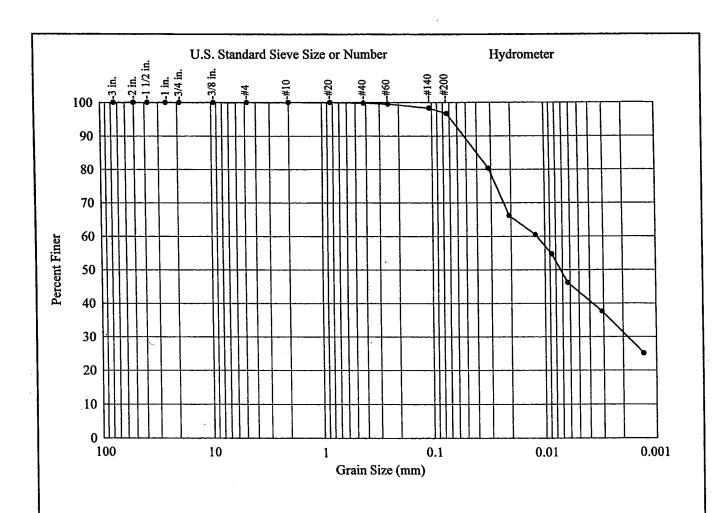
		% Sand							% Fi	ines	
% Cobble >3"	% Gravel <3" - #4	Coarse Medium #10 #20-#40 #6			Fine #60-#200		ilt .005 mm	Clay <0.005 mm			
0.00	0.00	0.:	32	1.	77	22	2.37	45.54		30.00	
Water Cont. (%)	Tot. Solids (%)	LL	PL	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	$C_c$	$C_u$
104	49										
		N	Iaterial I	Descriptio	on					US	CS
Very Soft Grayis	h-Black Elastic Sil	t With F	ine-Grai	ned Sand	<b>[</b>	* •				M	IH
	Projec	ct Descri	iption			<del></del>	Client I	P/N:	G339656	5-0001	
USACE-New En	gland District	-	-		•		AMS P/N: 2001-03			5-01	
Boston Harbor/W	eymouth Fore Riv	er/er					Battelle ID:		FR-LMN	1122600	-GS
							AMS I	D.	8345		

1/26/01

Date:



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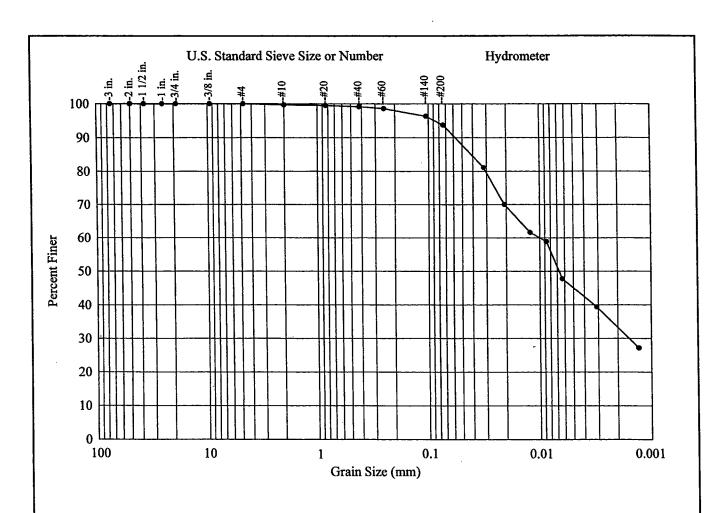


ASTM D422 (Particle-Size Analysis of Soils)

		<del></del>	<del>./</del>	% S	Sand				% Fi	ines	
% Cobble >3"	% Gravel <3" - #4	Coarse #10		Medium #20-#40			ine #200	Silt 0.074-0.005 mr		Clay <0.005 mn	
0.00	0.00	0.0	00	0.18		3.	.10	52	.72	44	.00
Water Cont. (%)	Tot. Solids (%)	LL	PL	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	C <sub>c</sub>	$C_{u}$
135	42										
		M	1aterial I	Description	on					US	CS
Very Soft Grayis	h-Black Elastic Sil	t, Slight	Hydroca	arbon Od	or					M	IH
	Projec	ct Descri	iption		<del></del>		Client F	P/N:	G33965	6-0001	<del></del>
USACE-New En	gland District						AMS P	/N:	2001-03	-01	
Boston Harbor/W	eymouth Fore Riv	er/					Battelle	ID:	FR-RSV	X12270	0-GS
							AMS II	D;	8348		
							Date:		1/26/01		



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ASTM D422 (Particle-Size Analysis of Soils)

ASTM D422 (Par	ticle-Size Analysis	8 01 5011	s)					т			<del></del>	
		% Sand						% Fines				
% Cobble	% Gravel	Coarse Medium					ine	Silt		Clay		
>3"	<3" - #4	#10		#20-#40		#60-#200		0.074-0.005 mm		<0.005 mm		
0.00	0.00	0.	28	0.	65	5.	.38 48		.69	45.	00	
Water Cont. (%)	Tot. Solids (%)	LL	PL	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	$C_c$	$C_{u}$	
123	45											
Material Description									USCS			
Very Soft Grayis	h-Black Elastic Sil	t, Slight	Hydroca	arbon Od	or					M	H	
	Projec	ct Descr	iption	<u>.</u>			Client l	?/N:	G339656	-0001		
USACE-New En	gland District						AMS P/N: 2001-03			3-01		
Boston Harbor/Weymouth Fore River							Battelle ID: FR-PQ			TUW122800-GS		
							AMS I	D:	8349			
							Date:		1/26/01			